

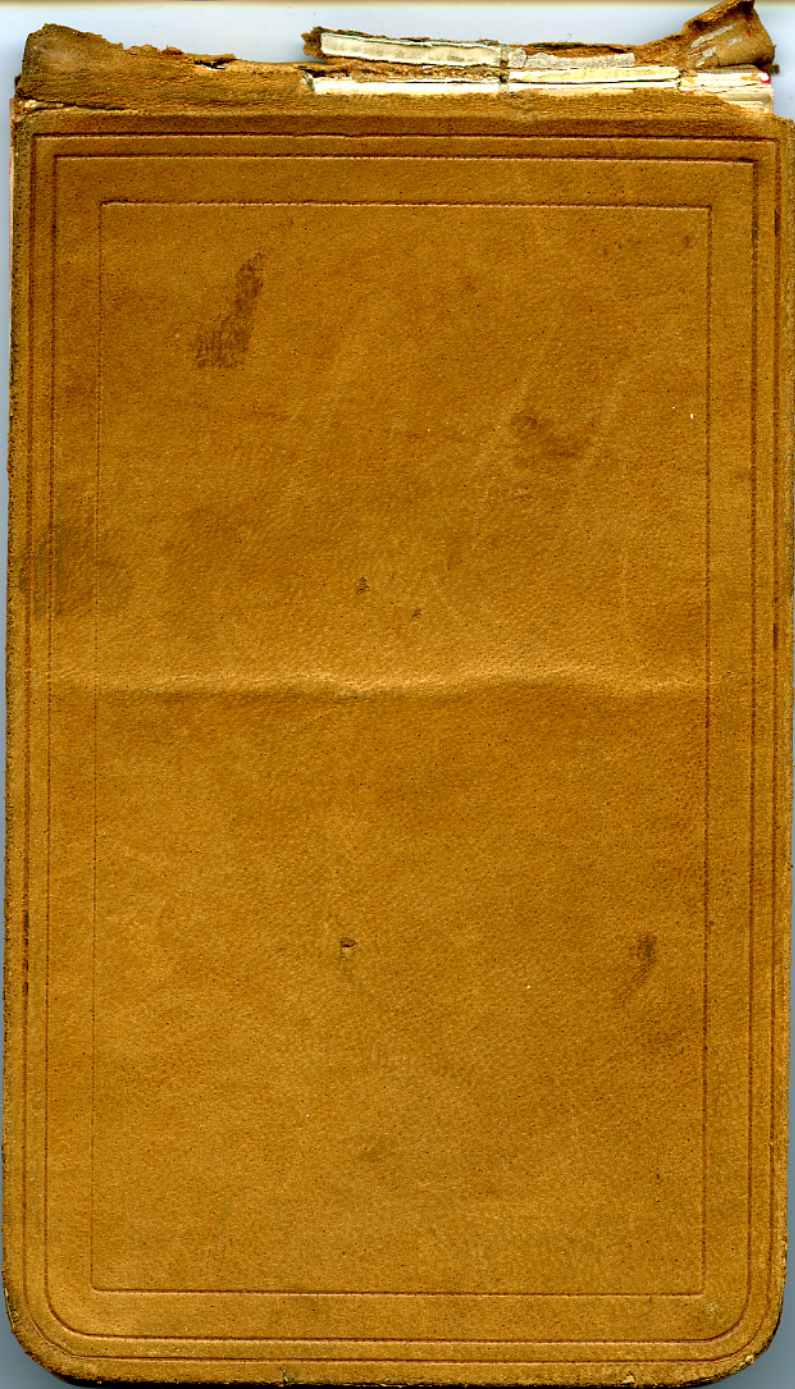


TABLE of Decimal parts of a FOOT for each Inch and Sixteenth of an Inch.

IN.	0	1	2	3	4	5	6	7	8	9	10	11
0	000	083	167	250	333	417	500	583	667	750	833	917
	005	089	172	255	339	422	505	589	672	755	839	922
$\frac{1}{8}$	010	094	177	260	344	427	510	594	677	760	844	927
	016	099	182	266	349	432	516	599	682	766	849	932
$\frac{1}{4}$	021	104	187	271	354	437	521	604	687	771	854	937
	026	109	193	276	359	443	526	609	693	776	859	943
$\frac{3}{8}$	031	115	198	281	365	448	531	615	698	781	865	948
	036	120	203	286	370	453	536	620	703	786	870	953
$\frac{1}{2}$	042	125	208	292	375	458	542	625	708	792	875	958
	047	130	214	297	380	464	547	630	714	797	880	964
$\frac{5}{8}$	052	135	219	302	385	469	552	635	719	802	885	969
	057	141	224	307	391	474	557	641	724	807	891	974
$\frac{3}{4}$	062	146	229	312	396	479	562	646	729	812	896	979
	068	151	234	318	401	484	568	651	734	818	901	984
$\frac{7}{8}$	073	156	240	323	406	490	573	656	740	823	906	990
	078	161	245	328	411	495	578	661	745	828	911	995

Part Lately on 8th 14

Gooch St. - Foundry & vicinity (L.) 59.
 Gate House - Union Falls. 24. &c.
 Grist Mill Yard to B & M. 7.

Laconia Yard - Grade road. 70.
 " Overfall to Peppell do. ^{28-1.4} 41-42-
 " New mill - Laconia St. 11-
 " Office Buildings &c. 1-
 " Yard - Levels - 3-
 " #3 Mill to York #1. 10-
 " Sh. Paving. 22-74
 Little Falls Mill, Falls. (L.) 12-13
 Line between S. W. & Co. & Box Shop do 54-
 " " " & Y. I. & H. Co. 15-16

Main & Elm Sts. - Survey. 61

Peppercell office to Reservoir (L.) 30
 " Canal - from York Dam (") 49
 " " - Overfall to " " 13-19
 " Overfall to Laconia do. 14-
 " " to N. S. Sh. Wheel - Lac. - 41
 Pearl, Lincoln & Elm Sts. - Survey 57.

Reservoir - Levelling to Peppell. 30

Salmon Falls - Height of Old Dam	HP -
" " to Union Falls Survey	62
S. W. P. Mach. Sh. Yard - (L)	43
" " " " " Survey -	50
Springs W. Canal	20
S. W. P. Co. Line at Box Shop	54
" Ship Yard " " Y. L. & H. Co.	15-16
Springs W. Canal	20

Union Falls to Salmon Falls - Survey	12-13
" " Survey near Dam	81 &c.
" " " - New Gate house	24 &c.
" " to Little Falls - Levels	12-13
" " - Zoe Tibbette - Farm	52

Water Pressure Test, - Pehl.	2
" " " - Lac.	5-6-
" " " - Ref. & Lac.	4-
" Supply Pipe line - basin &	8-9
Washington St. - Lat. W. side	69
" " " E. "	76

York Dam Measurements 25-27 &
 " " to Cataract dam leads. 29-
 " Light & Heat Co. line water sh 15-16

3.

Levels on Lacomia Yard, 1888.

2nd. Floor of No. 1 Mill - Datum	50.-
1st. " " " "	38.50
" " " " " "	37.00
" " " Office (Old)	50.03
" " " Machine Shop (New)	53.31
Pepperell Overfall Dam. N. End.	45.66
N. W. Cor. Cliff Hall - at Gate - Loc. St.	43.71
" " " Boarding Block - York & Loc. St.	60.89
Water in Canal - at Archer No. 1	28.71
Floor of Engine House	43.36
Roof of Engine House	64.38
Main St. Upper End New Clift Street	65.67
" " (Centre) Lower End - Buttern	43.50
Basement floor No. 1 Mill - about (Aug. 31/89)	23.82
Top of Lower Dam at Angle	28.417
" " Highest Stone for G. Shaft	31.985

Feb. 7 - 1889.

4.

- Pepperell Co -

Test of Gauge on water pipes on
the Pepperell & Saconia Corporation.

- Office Basement, Pepperell -

Basement Pump (Ashcroft) ^{5.16.11.10} 37 1/2 x 60 lbs. City gauge

Test " (Crosby) 32 1/2 x 55 "

- at sink in Basement of Eng. Ho. -

Basement Gauge 419 lbs.

Test " 412 1/2 "

- Basement of No. 3 Mill - at Pump -

about 6' above water in Canal

Gauge on Pump 410 lbs.

Office Gauge 50 "

Test " 415 "

- Basement of No. 1 Mill - at pump -

About 5' above water in Canal.

Gauge on Pump 38 lbs.

Office Gauge 50 1/2 "

Test " 412 1/2 "

Feb. 7, 1889.
- Laconia Co. Tests -

Basement No. 1 Well at sink - 4.25 above fm.
 Office Gauge - as above - 57 1/2 lbs.
 Test " " " " 53 "
 City
 Steamer Gauge (New Brunswick) 53 "
 * " " (after well shut down) - 55 "

No. 3 Well - (About 5' above datum)
 Office Gauge - as above - 35 lbs.
 Test " " " " 30 "
 Steamer " (New Fire Engine) 30 "
 * " " (after well shut down) 42 + "

- Note -

Wm. Beaton says the
 pressure at Hydrant on Water St.
 Biddleford - near 14th St. = 80 lbs.
 $\frac{80}{1.3} = 186'$ elevation

- Note 1 -

Elevation of Gauge in No. 3 54.17 ±
 " " " " No. 1. 28.17 ±
 Diff. of elevation 26' ±
 $26' \times 0.43 = 11.25$ lbs. difference by gauge.
 $53 - 30 = 23$ lbs. " by gauge!
 * see above.

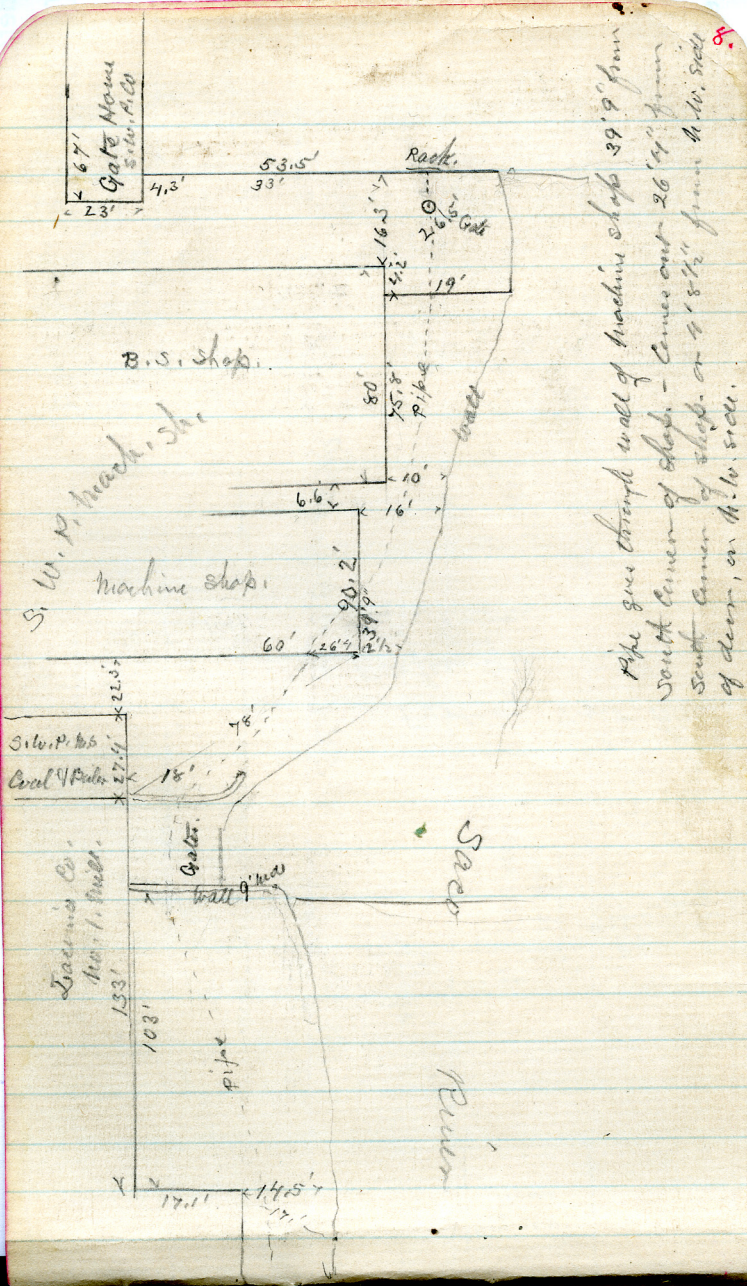
- over -

Feb. 8 / 89

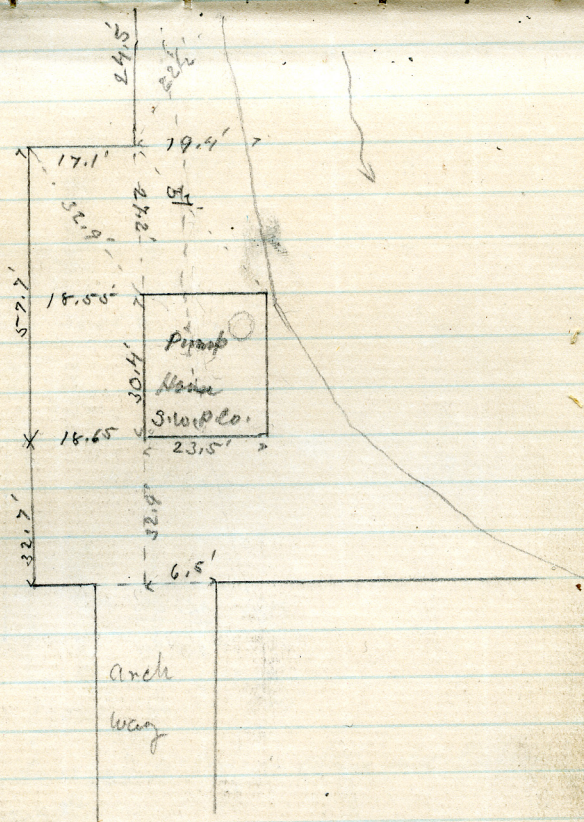
6.

With Steamer (Amuckag) Gauge
on pipe at sink in new cloth
room 3' 4" above cloth-room floor
which is 11' 1" above floor below
which is at + 50' (?) making
the Gauge stand at 61.5'
indicated pressure = 41 lbs.

Elevation of Dams.	
York Dam - (York Mark)	{ 51.30
Boadbury "	50.00
Springs "	59.05
Cataract "	58.22 (?)
Lower "	52.47
Lacoma Overfall	34.05
Tappan "	33.183
Creek Dam	51.28
	58.80 (?)



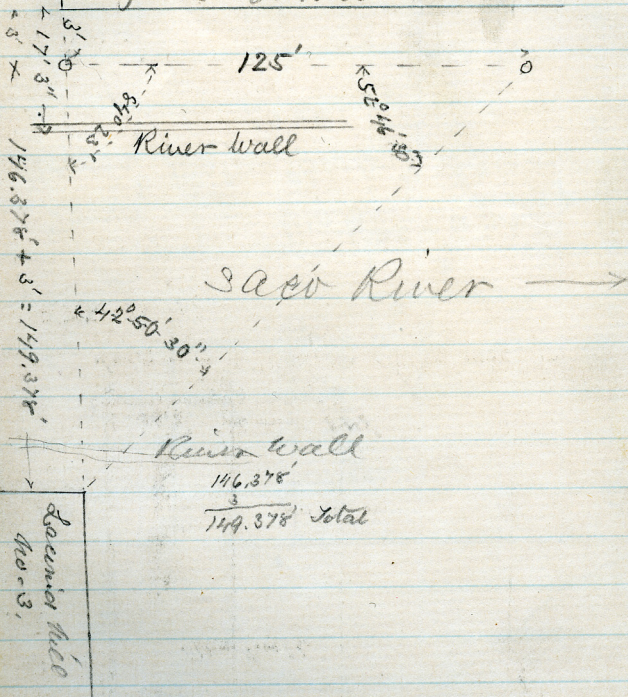
Pipe goes through wall of machine shop 39' 9" from
 south corner of shop. - Comes out 26' 4" from
 south corner of shop. or 2' 8 1/2" from N.W. side
 of door, on N.W. side



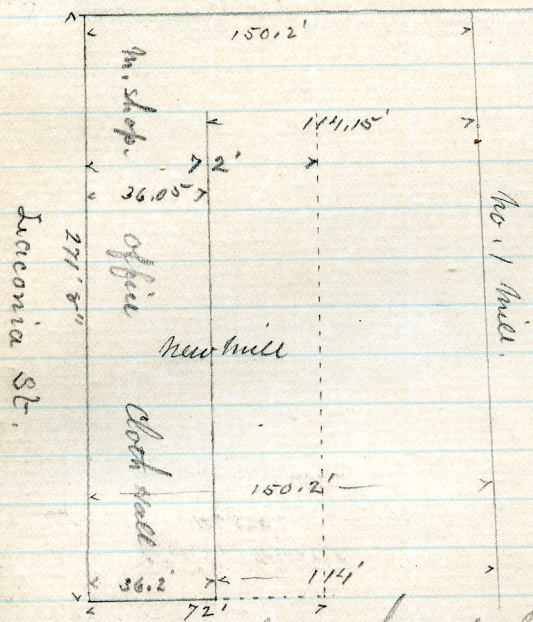
Survey for Water Supply pipe
 Across Water Power & Baconia Yards.
 1886.

Measurement of distance from York Co. Mill No. 1. to Lacombe Co. Mill No. 3. 10

York Co. Mill No. 1



Land of
S. W. P. Mash. Sh.



Laid out 4" longer than old building on
272' long.

Larson Co. New Mill

✓ Levelling from Little Falls to 12. Union Falls. Sept. 17, 1889.

Sta.	B.S.	F.S.	Diff.	Total	Remarks.	8.10 A.M.
BM	1,954			50.00	Highest point on lowest stone by oak hi. Falls	
1		7.000	- .5	44.954	Eddy - Prod. side	
2		6.966	+ .034	44.988	Below Is. - below Falls	
3		6.586	+ .380	45.368	Above Is. above Falls	
4	5.951	6.655	- .069	45.299	On S. shore - below fence	
5	5.546	5.662	+ .289	45.588	On Rocky Past. Bd.	
6	4.898	5.236	+ .310	46.898	" " " - Field	
7	4.983	5.222	- .324	45.574	" " " - Point	
8	5.783	5.228	- .245	45.329	" " " - near hemlock	
9	6.002	5.680	+ .103	45.432	" Saco " - toward bridge	
10	5.260	5.808	+ .194	45.626	" " " - by clay	
11	5.452	5.255	+ .005	45.631	" Dayton " - Lodge	
12	4.329	3.057	+ 2.395	48.026	" " " - on rocky bank	
13	5.472	6.630	- 2.301	45.725	" Saco - Milliken Br.	
14	5.567	5.349	+ .123	45.848	" Dayton " - Point off top below high landing place	
2, P.M. 15	5.481	5.405	- .238	45.610	" " - Lodge off wooden at road	
16	4.767	4.790	+ .691	46.301	" " " - above big stone road	
17	5.727	4.875	- .108	46.193	" Buxton " - Atkinson at	
18	5.594	5.709	+ .018	46.211	" Dayton " by woods - Lodge Union Falls	
19	5.100	4.990	+ .604	46.815	" Buxton " - at rip at	
20	7.095	4.900	+ .200	47.015	" Dayton " - on rocky spit Union Falls	
21	10.470	5.015	+ 2.080	49.095	" " - at B. bridge	

0.000	10.1420	59.565	Top of stone ^{Dam} at
+ 5.800		65.365	Top of Dam
			at Union Falls

(1.861)

Water at rip at Union Falls 2' + L. Falls

" " Union Bridge (4.141) 4' 2" + "

Top of Union Falls (Dam) (20.411) 20' 5" + "

with water about 12" ^{to 24"} below Bridge Dam

Levelling in Canal - from ^{Oct 10} Peppercell Overfall to York Dam

Showing fall in surface of water

B.S.	F.S.	Diff	Total	Remarks
------	------	------	-------	---------

11.4181			50.000	Pepl. Overfall - W. End.
---------	--	--	--------	--------------------------

11.740	- 0.256	49.744	Surface water at do.
--------	---------	--------	----------------------

1.875	4.450	+ 7.290	57.034	Point on W.P. Bridge in ^{good} ^{even} ^{slope}
-------	-------	---------	--------	--

13.065	8.735	- 6.860	50.174	Surface water at Shop - ^{pan bridge}
--------	-------	---------	--------	---

10.037	0.300	+ 12.765	69.866	Side walk - Locust St.
--------	-------	----------	--------	------------------------

3.185	11.350	- 1.313	68.586	In W.P. yet, above shop.
-------	--------	---------	--------	--------------------------

3.680	- 0.495	68.091	Stone - W. Cor. Stone Dam
-------	---------	--------	---------------------------

0.850	10.400	- 6.720	61.371	hindew sill - rear shop.
-------	--------	---------	--------	--------------------------

11.415	- 10.565	50.806	Surface water - above shop
--------	----------	--------	----------------------------

11.660	- 0.245	50.561	" " " " (close)
--------	---------	--------	-----------------

11.420	+ 0.240	50.801	" " below Guard Gate
--------	---------	--------	----------------------

4.960	6.800	+ 4.620	55.421	Wall at " "
-------	-------	---------	--------	-------------

10.400	- 5.440	49.981	York Dam - W. End
--------	---------	--------	-------------------

9.010	+ 1.390	51.371	Surface water above Guard Gate
-------	---------	--------	--------------------------------

March 19, 1891.

14.

Levelling from Pepprell Overfall
to Lacumia Overfall.

B.S.	F.S.	Diff.	Total	Remarks.
3.417				N. End Pepprell Overfall or W. End Upper dam
1.05	10.18	6.71	6.71	Top of rail - opp. S. Mac. St.
	^{5.36} 6.65			Corn. of Gate platform.
	12.06	11.01	17.72	Lacumia Over Fall - N. E.
	^{3.87} 3.92			
	11.79	+ .27	17.45	N. End - Lacumia Overfall

Difference of level between the two
points on Lacumia Overfall = $3\frac{1}{4}$ ".

Difference of level between N. End
of Pepprell Overfall & N. End of
Lacumia Overfall = $17' 5\frac{3}{8}"$.

Difference of level between N. End
Pepprell Overfall and point on
Lacumia Overfall at N. E. Corner of
Gate Platform = $17' 8\frac{5}{8}"$.

Water to be kept at a height
not to exceed $16' 10\frac{1}{2}"$ in basin

$$17' 5\frac{3}{8}" - 16' 10\frac{1}{2}" = 6\frac{7}{8}" = \text{N. End}$$

$$17' 8\frac{5}{8}" - 16' 10\frac{1}{2}" = 10\frac{1}{8}" = \text{S. " at Platf.}$$

Higher water may rise at dam,

Survey at Ship Yard - July 9 '91 -
 Harry Gees assisted - Geo. F. West
 Present - New-York Light & Heat Co.

Bearing of N.W. side of Severan
 (Long) House N. $55^{\circ} \frac{1}{2}$ E.

Bearing of front of Gees & Haine
 Block N. 51° W.

Distance from S. corner of Block
 to W. corner of Bradley House $14 \frac{1}{2}'$

A line starting at a point on
 N. E. side line of Water St. running
 N. $47^{\circ} \frac{1}{2}$ E. will pass 3" N.W. of
 stone wall - (at ground) - at front
 of Bradley House, & $12 \frac{1}{4}'$ ^{at Bradley Ho.} from W. cor.

At a point $31 \frac{1}{4}'$ from corner
 of Block to most N.W. tree
 in the bunch at the river is
 N. 49° E.

16.

Survey at Ship Canal for
Division line for deeds between
York Light & Heat Co. & S.W.P. Co.
Dec. 2 '91 -

H. Gore & Co. H. Watertown Ass'd.

Assumed line of Water St. to be
3.5' from W. Cor. Scoch & Haines Block
and 5' from S. Cor. do.

Thence beginning on the line of N.E.
said Street at a point 30' South
from the S. Cor. of Block of record,
thence North $50^{\circ}15'$ East with an
angle with line of Water St. an
acute of $102^{\circ}23'$ running to the
S.E. end of the top stone of the
new stone wharf of said York
L. & H. Co. Reserving a strip
15' in width on the N.W. side of
said line for a convenient passage
way for teams beginning at
the above named point 30' from
S. Cor. of Block thence to a
point on the above named line
74' from Water St. (where a

Stony will be set in the ground
(with hole drilled in top) to a
point 25.15' from N. Cor. of the
Broadway House and 28.55' from
the E. Cor. of Stone door step to
entrance to New Gas Holder;
the N.W. line of said passage
way to be 64' ft from line of
water str. - running parallel to
division line, thence diagonally
to point 74' from str.

The point on water str. is
30' from S. Cor. of Black
41.85' from Iron rod.
7.94' " Electric Light Pole
18.6' " W. Cor. Broadway house

See drawing for
location

18.

Levelling from Broadbury dam
 Gordonan Creek & Smith St. to
 Peppercell #3 wheel pit -
 May 17 '92

B.S.	F.S.	Dif.	Total	Remarks
16.30			50.-	Water below B. Dam
	10.70	5.6	55.60	" on dam
	11.40	.7	54.90	Broadbury dam
6.20	1.90	+9.50	64.40	Door step *
3.25	4.25	+1.98	66.35	Low stone W. Cor. Smith
	14.10	-10.85	55.50	Gordonan Creek Surface water in
	24.10	-10.00	45.50	Bottom
	7.40	+16.70	62.20	Top of wall .56' to sh.
	4.60	+2.80	65.00	Surface side walk
16.25	0.80	+3.80	68.80	Along corner R. p. edge Comb. opp. 20
	4.10	+12.15	80.95	Rear Block
7.45	11.55	-7.45	73.50	Cor. S. wall - low cor. peppercell/gard
2.05	4.70	+2.75	76.25	Near E. Cor. Con. Wall
5.00	15.75	-13.70	62.55	opp. Cor. Female Home
	3.20	+1.80	64.35	Bottom Floor West
	20.45	-17.25	47.10	Surface water in wheel pit below " below Broad. Dam or of upper level -

This shows a drop of 2.9' from surface water
 below Broadbury dam & do. at wheel pit on Pop.

Dif. of level from top of Broadby dam &
 York Dam = 7.75'. Deduct 14" flint band
 leaves 6.58' fall.

Levelling from Peppeli Overfall to
York Dam - Sept. 7- '92 (9. am)

B.S.	F.S.	D.I.	Total	Remarks
15.500			50.000	Avg water surface Top of Overfall Dam
	14.910	+ .590	50.590	Surface water below slope
5.110	9.750	5.160	55.750	Point on Bridge - S. side slope
	9.735	4.625	51.125	Surface water above slope " " "
	9.715	—	51.125	" " at G. H. Carrick
8.600	5.220	4.515	55.640	Wall cor. B. slope
	12.420	3.820	51.820	Surface water York Dam
	14.260	1.840	49.980	Dam (York)
				Revised
14.040			50.000	York Dam
	12.570	1.470	51.470	Surface water on do.
5.140	8.600	3.970	55.440	Point on wall - cor. B. S.
	9.680	4.540	50.900	Surface water below 2nd
	9.920	.040	50.860	" " above slope
11.500	5.050	4.670	55.530	Point on Bridge
	16.570	5.070	50.460	Surface water below slope
	17.010	.440	50.020	Overfall dam
				9.45 - Center

Result of 3 levels -

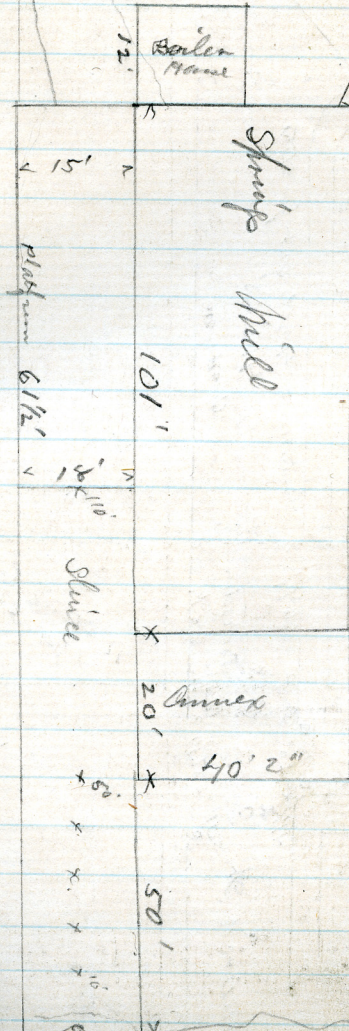
Peppeli overfall -	50.	York Dam	49.980	44.019
" "	50.	" "	49.980	" .02
" "	50.02	" "	50.000	" .02
				= .0 1/4 "

Levelling for Canal - Springs Island 20.
 Sept. 15 '92 2.15 P.M. - 917
 2.9
 3.517
 water 11" over on broadway dam
 2.9" below top of gate home, spring dam
 8" over spring dam

Sta.	B.S.	F.S.	Diff.	Total	Remarks
					B.M.
9'	13.05			50.00	
		11.12	1.93	51.93	Surface water above dam
		16.82	5.70	46.23	" " below dam
10'		15.62	1.20	47.43	10' from stone at water
		15.32	.30	47.73	20' "
		14.80	.52	48.25	30'
		14.68	.22	48.47	40'
		14.50	.18	48.65	50' line with shop.
		14.27	.23	48.88	60'
		15.50	1.23	47.65	70'
		15.95	.45	47.20	80'
		16.20	.25	46.95	90' 3' to Rock
		16.50	.30	46.65	100' 2 1/2' to Bottom Rock
		16.65	.15	46.50	110' 6" to Plank
					Under end platform
	11.12			51.93	Surface water above gate
		20.57	9.45	42.48	Bottom of gates.

Bottom of River above & below
 gate house (Springs Dam) 12.2' below
 top of gate house - (same level)

Well



ESB

Lacuna St Paving - June 1893

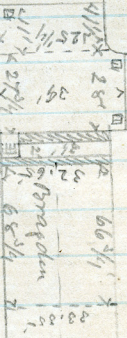
York St. to bridge
See over for some
between bridge to
Road St

York

Lacuna St

4 Grates out
3 1/4 yd each
St

22 Stm
1 1/4 yd - allowed for
allowance



Grates = 4 yds out for stone
41 3/4

Grading

Bridge

Stone

35-
32.65-
 3)67.65-
 33.825 Ave. width
 413.33 Long
1014.75
 1014.75
 1014.75
 1014.75
 33825

28
39
 252
84
 1092

11 1/2
11
 2)22 1/2
11 1/4
 25 1/4
55
 228
6
 284

135300
1395058.725 sq'

1092.
 284
9

Braford's stone

67.
33
 201
201
 2211
 1092
284
9

9)15366
1707 yds. Gross
 7 " out for grate &c
1700 yds. Total
21 Stone fm. yd.
 1700
 3480

9)3596
399 5/9
 3 cut
 Total = 396 5/9 yds

35700 paving stone Total @ 21 pr. yd.
 @ 58.-/pr. 7/4 = \$2070.60

Total = 396 5/9 yds

1700 yds. total
 396 5/9 = Braford's stone

1308 7/9 - Goodwin's stone @ 21 pr. yd. = 27572
 allowed Goodwin 25 pr. yd. -
 - Paner -

13981 1/4' - when York st.
 1092 } fine, York & lacund
 284 }
 97 - Criss walk
 625 - Reland - old stone

9)15428
1714 2/9 yds. @ 0.15
18
 13712
 #17144
308.56

72 = 4 yds. reland
 #309.28 paid June 20 '93

Mr. Goodwin says has balance

36040

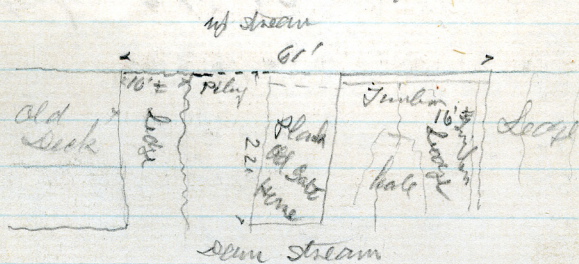
22
241

Survey for New Gate House at Union Falls.

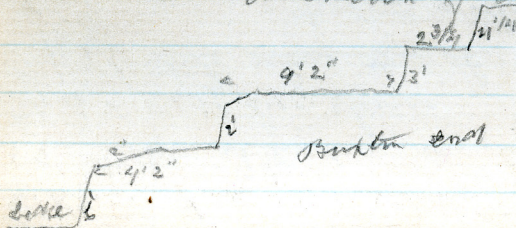
Sta	in	D.S.	FS	Dif	Total	Remarks
		9.20			10.00	S.W. End of Old dam
		9.65	- .15	10.45		About 50' N.W. of do
		10.55	- .90	11.35		Stone S.E. of big dike
		8.20	2.35	9.00		Top of Ledge - near big dike
		7.90	+ .30	8.70		" " " " Coffin dam and out
		11.20	- 3.30	12.05		" Bolt End old dam
		10.70	+ .50	11.50		" " (nearly) " "
		15.75	- 5.05	16.55		Top of ledge - 1st. Bench
		18.25	2.50	19.05		" " " - Edge next. Gap
		24.00	5.75	24.80		Old Sill - N. corner
		24.35	.25	25.05		Ledge north of do.
2.15		9.25	15.10	9.95		Edge of Old Sack.
		16.80	14.65	24.60		N. corner Old Sill - near above
		16.80	00	24.60		Sill 8' S.W. do
		16.80	00	24.60		" 16' " "
		16.90	.10	24.70		" 24' " "
		16.90	00	24.70		" 30' " "
		17.00	.10	24.80		Old Piling
		17.82	.82	25.62		Ledge - cor. old Sack

Union Down Con

Top of old deck	2.15-
h. con. on sill	16.8
on sill 8' S.W.	16.8
" " 16' "	16.8
" " 24' ± "	16.9
" " 30' ± by plank	16.9
Old Plank bot. Gate No.	16.5 & 16.6
Old Sill S.W. side No.	16.85
" Piling	17.00
" " 6' ± S.W.	17.9
Lodge at con. old deck	17.82
Plank Apron to top of old deck	14.23



Plan or sketch of bottom



Timber for formulating Union Dam

58' x 22' x 12'

$$\begin{array}{r} 22 \\ 114 \\ 114 \\ \hline 1254 \end{array}$$

$$\begin{array}{r} 22 \\ 12 \\ \hline 8.25 \overline{) 264} \text{ " } 32 \\ \underline{2475} \\ 1650 \\ \underline{1650} \end{array}$$

32 sticks 58' long.

$$\begin{array}{r} 32 \\ 114 \\ \hline 1254 \end{array} \text{ in length } 8' \times 12'$$

1 stick 24' 12' x 12'

Nov. 7, 1893.

28.

Levelling from Laconia Overfall to Pepperell Overfall.

B.S.	F.S.	Dif	Total	Remarks
	12.45		50. -	Laconia Overfall - N. End
	11.87 + .58		49.42	Top Flash board do.
	8.56 + 3.29		46.13	Cent. wall - on top do.
8.3	12.70 - 4.12		50.25	Overfall - S. End - above und. pin.
8.30	0.00 + 12.70		37.55	Cent. wall - N. 5 feet - 1 1/2 inches
	3.30 + 5.00		22.55	Pepperell Overfall - N. End
	2.15 + 1.15		31.40	Flash board do.

Laconia Overfall - N. End 50.00
 Pepperell " " " 32.55
 " above Laconia 17.45
 = 17' 5 3/8"

Laconia Overfall - N. End. - 50. -
 " " S. " 50.25
 = 3" lower at S. End. 25
 $17' 5 \frac{3}{8}" - 16' 10 \frac{1}{2}" = 6 \frac{7}{8}" = \text{Height}$
 water may be raised above dam -
 - See March 19 -

Levelling from York Dam to Cataract
Dam. Aug. 25-1894.

B.S.	F.S.	Dt.	Total	Remarks
5.128				York Dam
	3.955	1.173	+1.173	Cataract "
				(Instrument on flat.)

Levelling do. Aug. 28 '94.
- Test - - York to Cataract -

15.20				York Dam
14.55	0.85	14.15	14.15	Point in St. by R.R. gate.
	4.70	9.85	24.10	R.R. Bridge - near Cat. dam
3.02		14.40	9.60	Stone below in walk
	11.45	8.43	1.17 +	Cataract dam

Do. Cataract to York

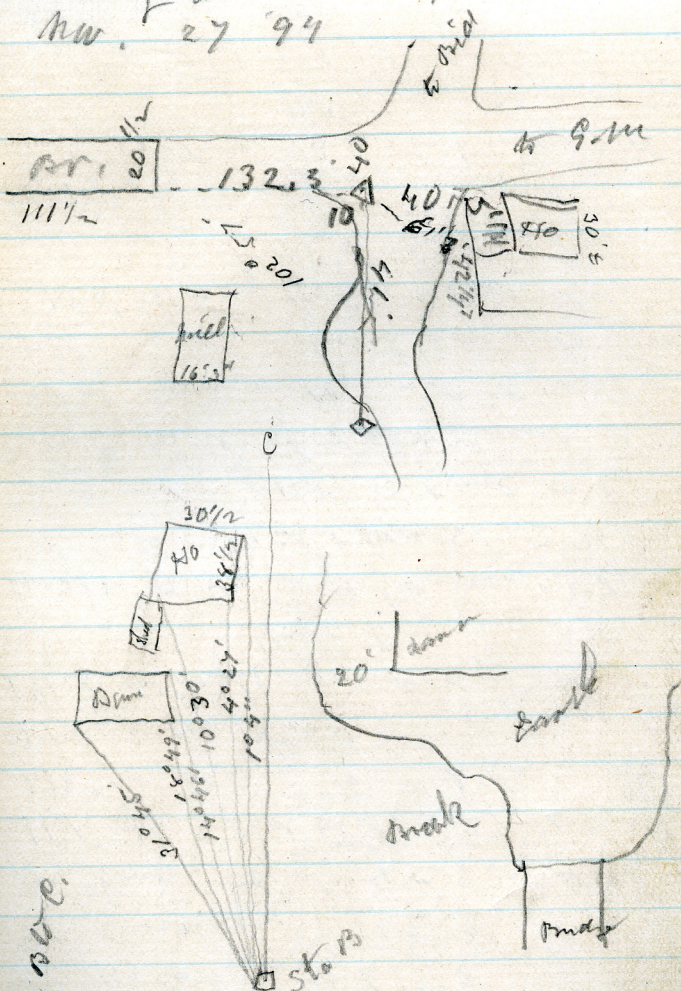
11.45				Cataract Dam
	3.02	8.43	8.43	Under Bridge (R.R.)
4.70		14.40	22.83	R.R. Bridge
0.85	14.55	9.85	12.98	Point in St. near R.R. gate
	15.00	14.15	1.17 -	York Dam

Cataract 1' 2" above York Dam
water $7\frac{1}{2}$ " below top of bluff behind on Cataract when
full on York side. In river will be making

Levelling from Peppercell Co. Room
to Reservoir July 16. 1887. 30.

O.S.	F.S.	Dif.	Total	Remarks.
5.267				Floor of Counting Room
10.408	0.300	4.967	4.967	Side walk.
	5.805	4.603	9.570	Ant. Cen. gaff. & wash. str.
11.205	0.300	5.505	15.075	f. B. cracked curb.
11.280	0.352	10.853	25.928	Adams St. Side walk
10.240	0.329	10.951	36.879	Yard - Sinter of Chantry
11.275	0.514	9.726	46.605	" " " "
11.200	0.470	10.805	57.410	" Walk " " "
7.172	0.460	10.740	68.150	" Near Roundhouse
	2.620	4.553	72.703	Bottom of Beams - res'r.
		- 4.500	68.203	Surface of water
				When there is 13.5' water
		4.750	63.453	Gauge to water in reservoir
This means Recording gauge.				
With 13.453' water - Bot. of Res. = 50' - above gauge				
Bot. of Res. 58.75' above basement gauge				

Survey at Union Falls
Nov. 27 '94



N. $24^{\circ} 30'$ W.

Sta. 1, on line to fence at
Mordman house $51' 3''$

to W. Cor. $61' 3''$

to Bridge $132.3'$

on line $50' - 48.5'$ to H. Cor. fence

$117'$ off S. End wall $27'$ to mill

$173'$ " W. " " $24\frac{1}{4}'$ " "

$173'$ to Cen. Road

$53.7'$ S. E. to

$191.8'$ to Angle near Bridge $58' W. " "$

- Angle B, "

Angle to S. in Hophornes $57^{\circ} 41'$

" to Sta. C, near stone $162.33'$

$12.5' - 3'$ to wall on line

of S. E. side of gate house &

end of Dam wall. $-20'$ to angle in

wall - remainder line of gate house

$13' 3''$ S. side only $16.25'$ to Bridge $-2'$

$21' 8''$ line to W. Dam.

$29' 5''$ to brook

$14' 7''$ or. $70.5'$ " " " "

$78.5'$ end Bridge $-0'$

$100'$ to run

line of Dam $57.9'$ $159'$

N. to do. $195'$

off. Cor. Cor yard $195'$ road $8'$ River $32\frac{1}{2}'$

2¹/₂ Cor Horse 20 1/4, 233, 8' 3¹/₂ sec 8'
Rider Ho. 5' 275' 26' to Road. 92 River
3 by trees one stump 10' apart by

Home 38 1/2' x 30 1/2'
21' to Rd. 47' River 300'

380 Cen Road - Cross.
68 to River 400' Road 5'
473.9' to Angle "C"

Angle to L 141° 23' Δ C' 72' L to Stone & fence
Angle C. to Angle D. in Road
150° 28' R

Angle C. to Δ "E" by river 140° 36'
on river line

55' River	100'	60' back Bld.
42' "	200'	
22' "	300'	
30' "	400'	
32' "	500'	
38' "	600'	
35' "	652.5' to angle E.	

C. to D.

	100	65 1/2' Rd - 83' fence
End of fence by rd.	158	73' " 88 "
	200	64' "
Old fence on bank	300	54' Rd. 20' ± fence
	400	42'

Road 18' wide

Line C. to D. Cen.

34.

— Backwards —

on hill	500'	24'	Road. Cen.
Old fence 20'	600'	12'	"
Cross	690'	0	"
Road 6' R	719.3'	Δ D.	Grand Jet
	Δ E.	161° 49'	R.
River 30'	100'		
" 18'	200'		
" 10'	300'		
" 6'	330		
" 25'	391.5'	to Δ F	
	421'	to Cen. H. L. Brooke	
	Δ F L	66° 6'	Def.
30' mark	50'		
22' "	100'		
30' "	150'		
	182	Cross road	
	192'	Point on D. G. H.	
	Δ D	in road by G. Pit	
Δ C. D. H.	R.	in road at 152' 9"	
	60	Cen Road	
	100'	6'	"
	150'	3'	"
	200	2'	"
	240	0	"

Road 3' 300
324 0 road

Δ H. 339.75' 4' "

Δ D, H, J. 146° 31' L

Road 10' 50'

" 10' 70' old fence 20' long 30' long

Brook 23' 6' 100'

" 6' 126.85' to point from F.

Brook 25' 192' Brook crosses road

Road 4' 200'

257' 18' Cen. Woodman fence

Road 6 266.4' Δ on line " "

J Δ = 68° 51' - S. 46° 0' W. 318.4
S. 52° on hill
on Woodman line

From Δ J

18.5' to Cen. fence

105' " Brook edge of woods

Nearly at R.R. 1024.5' " Creek fence

975' $\pm$ Woodman Graded line

1206 top of hill field

1796' Ramble

1917 Fence - Right

2041' to Runnels Brook

Thence 5,880' 158' 0' = 10' south down brook

100' 25'
140' 35'
161.5' 45'

Thence N. 80° E.
 50' 20' Break
 75' 12' "
 100' 10' "
 125' 20' "
 150' 30' "
 175' 30' "
203' 20' "

Thence S. $45^{\circ} 30'$ E.
 50' 10' "
 75' 8' "
 100' 12' "
125.5' 20' "

Thence S. 19° E.
 25' = 30' "
 50' = 45' "
 75' = 25' "

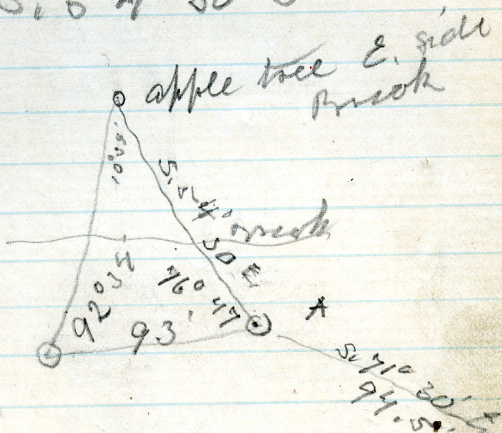
111' 10' "

Thence S. $46^{\circ} 45'$ E.
 50' 20' "
 100' 25' "
 150' 10' "
190' 12' "

Thence S. $25^{\circ} 15'$ E.
 25' 30' Break
 50' 30' "

Little dam 75 = 40'
Angle Δ 106.5' 30'
131' to Brook.
Thence N. 43° E.
50' 25'
75' 15'
100' 12' - ^{v. dam} Ram
129' 40' "
Thence S. 81° E.
50' 40'
100' 30'
149' 10' Dam?
Thence S. 67° E.
all rip on left 30' End fence
25' 15' break
50' 35'
75' 35' "
105' 20'
Thence S. 75° 30' E
fence 25' 40'
50' 40'
81.5' 30' West
Thence N. 60° 30' E.
143.25' in road
Thence S. 71° 30' E
to ran line 44.5' 75'

Course to apple tree
app. side Brook
S. 54° 30' E



Thence - bore line extended 75' water
18' to water

50' High ground 100'
60' 150'
45' 200'

248 High ground
300 " 20'

93+

Thence N. 29° 15' E.

50' low ground
123.5' to stone by
road - mentioned in deed

From Angle B - down Hepburn field
 86' edge road
 + 10' right 90' about to slump
 150 30'

200 25'

250 35'

300 25'

369.25' 400

Δ R. 154017 to tree

8169030' W

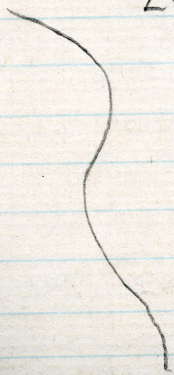
81.25' to tree

Thence to Irregularity A

100 - 450' water

150 20'

200 to bottom



200

Levelling at Salmon Falls - No. 40.
 with the height of old dam.
 Data from Mr. Quinby's note book, no. 8.
 Gen. 95

B. S.	F. S.	Dif.	Total	Remarks.
0.000			208.937	B.M. Und. pin - Ruxton Meeting House. N. E. Cor. - top
1.314	11.183	-11.183	197.754	In rd. N. E. main road
1.287	10.349	-9.033	188.721	" " Off. S. End Dr. Dr. River
0.552	10.824	-9.537	179.184	" " on Fence wire
2.645	9.680	-9.128	170.056	" " Off. Ell to River
1.768	11.130	-8.485	161.571	" " Home on left
0.808	10.766	-8.998	152.573	" " just beyond
2.412	11.000	-10.192	142.381	on Port right side
1.602	9.297	-6.885	135.496	" " Off. House (1st)
1.003	9.978	-8.376	127.120	" " top - Hill off. fence
0.637	11.087	-10.084	117.036	" " on hill side
1.028	11.078	-10.441	106.595	" " " "
1.208	7.188	-6.160	100.435	" " " " 1st
2.524	10.882	-9.674	90.761	" " foot of Hill (Junc.)
	8.320	-5.996	84.965	* Stone - 2 nd below stone on dam
	5.064	+3.256	88.221	last point end longest plank over

* Old piling on Hollis side level with 2nd stone
 as above. Mr. Quinby notes place top of old
 dam at 80.900 - 84.965 - 80.900 = 4.065 =
 dam below piling.

120.248 Top Front deep ^{Heene} ~~main~~ ^{floor}

1.327 6.840 6.840 113.408 Door step

2.107 10.707 9.377 104031 In road

2.291 8.132 6.025 98,006

see above

6.906 4.615 92.391 End longer plank strip

5.725 32.582

90.135 Stone as above

5.725

26.857

120.248

93.391

26.857

120.248 top of door to step

6.840

113.408 = Door step

80.692 = 1st from C. of flume

32.716 to belt

Aug 15 1895

Levelling from Poppl. Overfall to wheel when level (blacksmith wheel) Laccina Co.

To transfer overfall level to wheel house -
Carried same level around on wall -
and found it to be $2\frac{7}{16}$ " below the floor
at W. Cor. of flume, or $3'4\frac{7}{16}$ " below
top of timber of flume at said corner.

Levelling from Surface of water below
Poppl. Overfall - Race water; to Laccina
Overfall: - $10\frac{1}{4}$ " flash boards on Poppl. -
80.00 - Flash boards - level cut up.
16.32 Surface water N. End.

5.09 11.15 + 5.17

Point on Bridge overfall
12.25 - 7.19 - 2.02 N. End, Laccina Dam

11.60 + .68 - 1.34 top flash board do
- Over -

Level Pepprell to Laccenia ^{May 15, '95}
— see preceding page —

The water in the basin below Pepprell overfall varied in height as follows:

First trial: - begin at N. End going South.

16.33 N. of North Arch. in Eddy -

16.35

16.40

16.72

16.72

17.00 S. of South Arch

Second trial: begin at South End - South of overfall, in Eddy

17.07

17.00

16.85

16.65

16.50

16.45

16.32 N. End - in Eddy.

Laccenia Black board 1.34 lower than N. End
and 0.59' lower than S. End.

Levelling in S.W.P. Machine Shy east May 28 '95

B.S.	I.S.	Dif.	Total	Remarks
8.650 4.412 13.062				N. End Gate House Surface water above Gate
	5.919 13.275	-.213		" " below "
4.565 4.282 12.817	5.017 16.12 12.629	+4.33	16.46	" " Jordan Creek Gate 10
	4.588 8.343 13.145			" " Above Gate S. End " " below " " "

June 14 '95 Levelling from Bradbury Dam Gate House to Spring Clean Gate House & to Saco side - Sunny height of Freshet Apr. '95 (Apr 17)

12.160				Bradbury Dam Gate House
6.814	4.100	8.068	8.060	70 freshet mark on mill
6.814	2.364	+1.736	9.796	Point in road way at Niagara
0.604	8.250	-1.736	8.360	Freshet mark New Gate House

Put notch on gate post, and ^{E.} corner of
Sally's shop - for height of Freshet.

15' 10" above plank of flume at mill.

Water up to sill of old mill.

Leveling at Salmon Falls - June 14, 95
 from "Buxton" meeting House to Salmon Falls
 Hollis side &c. - Harry Jace assisted

B.S.	L.S.	D.L.	Total	Remarks.
0.414			208.937	L. Corner Top end, pin - Buxton Church
0.985	11.200	10.786	198.151	Side road near house
0.462	11.200	10.215	187.936	2. end Point opposite Dr. Summets Shop
0.631	7.526	7.064	180.892	" " Road
0.458	10.265	9.634	171.238	Hub of Cart wheel by barn
1.466	10.968	10.510	160.728	9m road top of hill near saw
0.837	10.912	9.446	151.282	" " side " " "
1.114	9.766	8.929	142.353	" " Bottom "
0.424	6.148	5.034	137.319	" " on ledge opp. barn
0.875	8.494	8.070	129.249	" " on ledge
0.442	10.658	9.783	119.466	mouth of mine " " top of Hill near white house
2.257	14.120	13.678	105.788	" " Cor. of fence
0.623	10.706	8.449	97.339	" " side of Hill
0.525	6.100	5.477	91.862	8" from ground Drill hole in N. Cor. Girdle post over center of fence post
	0.886	0.361	91.501	N. side waterway, through Hollis
1.862	10.454	9.568	81.933	Spot on ledge - near dam
	3.103	1.241	80.692	

92.555
 91.462

 1.093

Salmon Falls - Hunter side - Saco Road.

10.700 148.928 Opp. Marshall Hb.
 1.446 11.126 420 148.508 " Home top of Hill
 1.146 11.149 9.703 138.805 In Road
 0.644 10.855 9.772 129.093 " " Si Corner
 0.755 10.830 10.186 118.907 " " Opp. Big Home
 0.408 11.000 10.245 108.662 " "
 2.081 11.080 10.672 97.990 " " N. Corner 8" from ground
 7.516 5.435 92.555 Drill Hole in Guide post.

Salmon Falls - Hollis side.

8.953 91.501 Watering trough
 9.814 0.603 8.350 98.851
 0.950 8.864 108.715 Deer Steps, near Dam

$$\begin{array}{r} 108.715 - 91.501 = 17.214 \\ \text{Height of dam} = 6.840 \\ \text{Watering trough} = 24.054 \end{array}$$

 7.146 91.501 Watering trough - Hollis
 2.900 10.892 3.746 87.755 on Hill side
 0.781 8.610 5.710 82.045 spot on ledge
 1.926 1.145 80.900 Height of dam
 0.357 91.862 Drill Hole in Guide post
 11.319 108.52 80.900 Dam

91.501
 30.910
 10.601

24.054
 10.601
 54.655
 Hole below
 39.556
 34.655
 11.901 to dam for
 dam

Levelling from "round stone" near
 "State" Garden, on road from Minn Falls
 to Salween Falls. This stone is 1 mile from
 Minn Falls & 1 mile from Salween Falls.

B.S.	I.S.	Dif.	Total	Remarks
2,832			110.784	S. Garden Lane Stone side road near
0.393	10.897	8.065	102.719	in road - on hill
2.072	10.662	10.269	92.450	" - near oak tree
0.501	10.744	8.672	83.778	" on tree E. C. R.
0.485	11.237	10.736	73.042	" " " "
0.454	11.057	10.572	62.470	" " " "
0.320	10.655	10.201	52.269	" " " "
1.094	10.718	10.398	41.871	" " " "
0.300	10.827	9.733	32.138	" " " "
0.585	7.344	7.044	25.094	N. End C. R. Bridge
10.600	0.825	-	24.024	road foot of hill
10.723	0.000	+10.600	35.454	" " " "
11.187	0.000	+10.723	46.177	" " " "
10.940	0.000	11.187	57.364	" " " "
10.641	0.000	10.940	68.304	" " " "
10.591	0.000	10.641	78.945	" " " "
11.430	0.000	10.591	89.536	" " " "
11.150	0.000	11.430	100.966	" " " "
5.925	0.000	11.150	112.116	OK shoe on that Big stone R. side road
11.108	0.320	5.605	117.721	On road
11.145	0.000	11.108	128.829	" "

11.470	0.020	11.145	139.974	"	"
8.125	0.377	11.093	151.067	"	"
7.757	2.900	5.425	156.492	on ledge off oak	
2.912		7.845	161.337	"	"
3.916	8.238	5.326	156.011	In road off Johnson house	
0.883	11.120	7.204	144.807	"	Top Hill (near-)
0.310	11.159	10.276	138.531	"	" " " "
1.366	10.724	10.414	128.117	"	below oak
0.524	11.035	9.669	118.448	"	"
0.450	10.734	10.210	108.238	"	"
1.578	10.896	10.446	97.792	"	"
	7.400	5.822	91.970	watering trough - 4 ft. in	

				(See back 2 pgs.)	
0.987			80.90	Hul. level of Stone	
0.336	10.823	9.836	70.064	on ledge -	
	11.100	10.764	59.300	bottom in river	
				Head = 20.600	

Taking these levels, the result was that it gave a height to the dam nearly five feet above the point where people who were supposed to know stated the old dam was. In ^{my 2 night's} note book #8 page 7, is noted as follows: -

"109.297 In. Cut tot of front
door of Messer Sumner's home."

This house is new (1895-) just
as it was in 1850 when the
second was made in the note
book. Figuring from the fore-
sight recorded would place the top
of the dam at 120.248, and
the height of the old dam is
given as 80.692 making the old
dam 39.556' below top of front
door. June 20 1895 put drill
holes in ledge on each side of
river at that height for the new
dam. These points are 15.864' -
drill hole in N. cor. of Guide post on
Buxton side. 4.902' below hub on
bank of ravine near bushes - Hollis
side, dam 15.552' below top of
watering trough - 39.556' below top
of door - = under side stone cap -
(Dam was built about 1 ft.
higher than points given)

Leveling water in Peppinell Canal
Nov. 5 - 1895. 4.00 P. M.

With old & new Guard Gates up -

York Dam	$13.91 + .27$ (for grade stake) =	14.18
Surface water at West End dam		12.91
Making water over dam		1.27
Water ^{about 15'} below old Gate-house		13.26
Making a less through gate house =	$= 4\frac{1}{4}"$	.35
Water below Angle - S. E. side -		13.35
" " " " " " " " " "	upper side	
" " " " " " " " " "	at Bridge - near Gnometer	13.45

- With New Gates Closed - 4.05 P. M.

Surface water below Gates		13.39
" " " " " " " " " "	Angle	13.40
" " " " " " " " " "	Can. Canal at Bridge	13.50
" " " " " " " " " "	N. W. End Bridge - upper side -	13.62
" " " " " " " " " "	S. E. " " " " " "	13.45

- With 3 New Gates Open - 4.30 P. M.

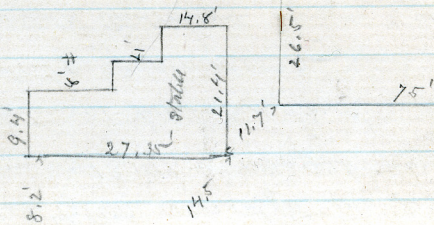
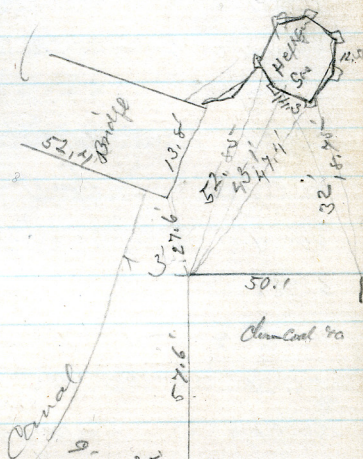
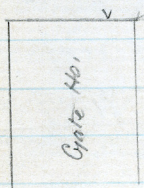
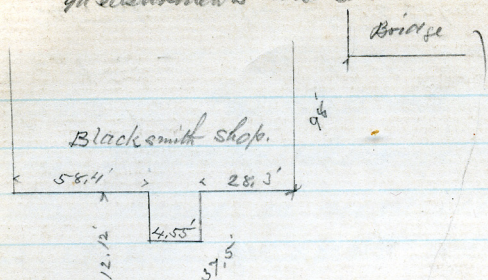
Surface water below Gate House		13.50
" " " " " " " " " "	Angle	13.60
" " " " " " " " " "	Can. Bridge	13.60

The same points taken at each
observation - Instrument in same
location - On Peppinell Overfall -

All gates up - water $2'6\frac{1}{2}"$ below stone bulkhead
With new Gates closed $2'1\frac{1}{2}"$ as do.

Measurements in S.W. Machine Shop and

50.

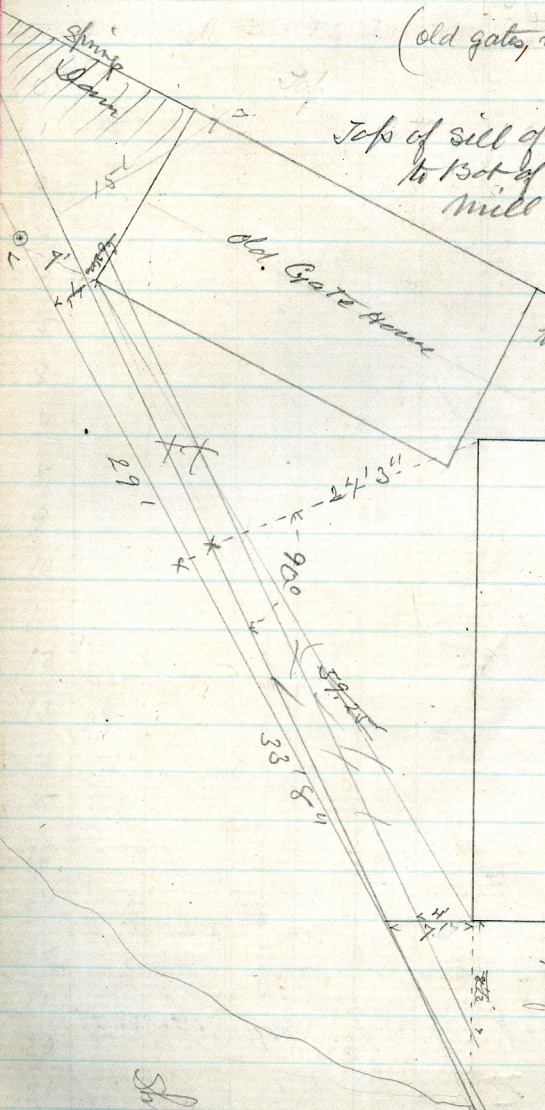


Survey for new Gate House - July 18 '96

(old gate, removed July 23 '96)

Top of sill of Gate House
to Bot of sill of old
mill = $17\frac{1}{2}'$

Old gate
house 3" lower
than Niagara



Spring
Mill

Niagara's

Shore

Nov. 20 1896.

52.

Zoe

Measurement of Mrs. Zoe Tibbott

Intervals - Union Falls - Burlington -

Begin at stump with iron post -

River side - ditto Base of hill

410' to river	0	10' to foot of hill
20'	90'	20'
20	180	20
15	225	10
10	270	20
to Beech tree	340'	
20	360	20
50 (Sub.)	450	10
75	540	10
100	630	15
110	720	20
120 (Sub.)	810	25
150	900	40
160	990	40
140	1080	35
130	1170	50
135	1260	45
105	1350	35
75	1440	35
60	1530	30
60	1620	35

50.

50	1710	35
50	1800	30
50	1890	50
70	1980	50
55	2070	45
40 (Sub)	2160	30
40	2250	40
40	2340	30
55	2430	30
40	2520	25
50	2610	15
45	2700	10
45	2790	15
25	2880	25
20	2970	30
20	3060	20
30	3150	5
30	3180	0

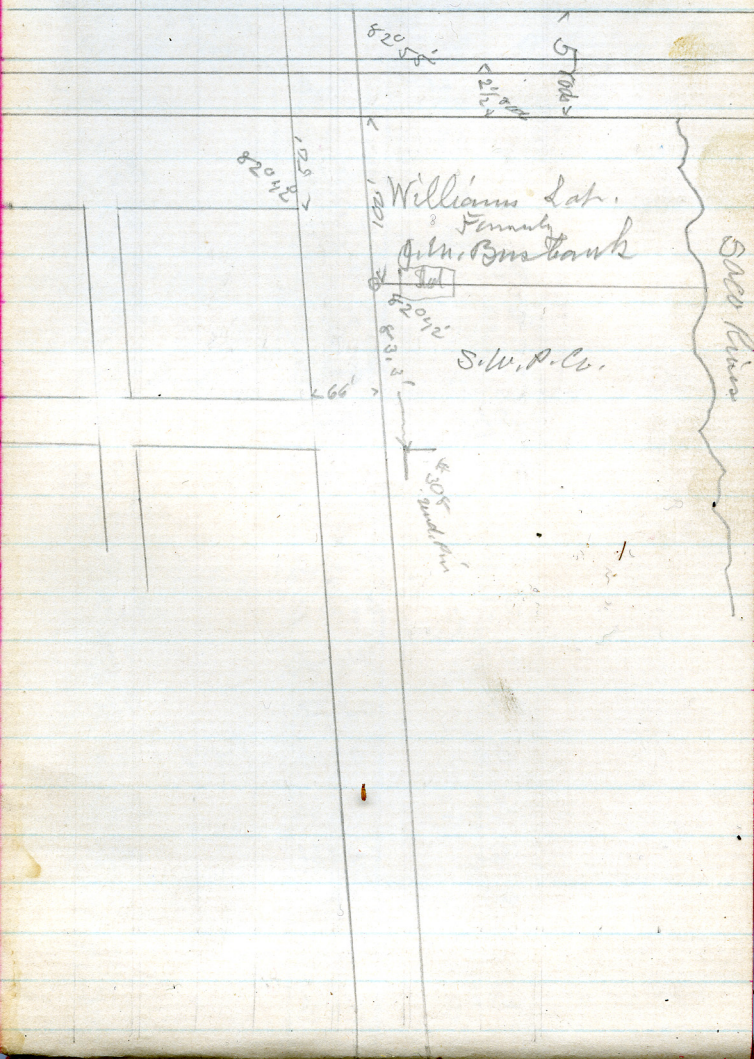
Average width 91'

$$\frac{91' \times 3180'}{43560} = 6.64 \text{ Acres Area}$$

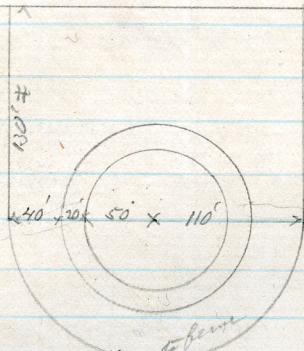
6/10 of a mile long -

Barney, near C.S. & P. R.R. Station
to determine division line between
S.W. P. Co. & Williams' Dix & Lumber Co

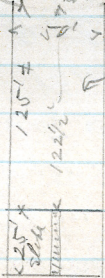
Oct. 14-15-99



Birch St.



Otis Helms Lot,
Nov. 15, 1850,



Adams St.

This lot was decided to
Roman Catholic Priests of
Portland, Jan. 1900
Paraff received

W. P. Haines Lot
May 1, 1852.

No record of laying out of Adams
St. above Jefferson St. on City's
Record of Streets.

Measurement of Jordan & Bryant lot
#69 Elm St. Bird clef - 56.
June 16 '99

S. W. P. Co. sold to Israel Cluff of Lyman
Dec. 24, 1867 for \$900, - as follows.

Beginnings on the S. Easterly side of
Elm St. at the East corner of a lot of
land owned by L. S. Baldwin; thence
by said Elm St. N. Easterly 49 ft.; thence
S. Easterly 70 ft. to a point 6 in. from
the wood-house occupied by F. D. Sawyer;
thence Southerly parallel with said
wood-house and 6 in. from the same
to the West corner of the same; thence
S. Westerly 31 ft. to said Baldwin's land;
thence by said Baldwin's land
N. Westerly 88 ft. to said Elm St.
and point of beginning.

The "Baldwin lot" was sold to
Pepprell Co. - as follows: Bounded
by land of Jordan & Bryant 5 rods 2 links
to East corner of said lot; thence S. 55° W.
4 rods, 7 links to S. corner of sd. lot.
P. 409 1/2

— Levels —

R.R. Track near Pearl St. $3' 9\frac{1}{2}"$

Curb cor Elm & Lincoln $10' 0\frac{1}{2}"$

Rail at W. Cor. $2' 9\frac{1}{2}"$

16.35' E. Cor Stone Hc. to drill hole in
Curb, $7' 9"$ from line of Elm St.

65.05' from W. Cor. do. to do.

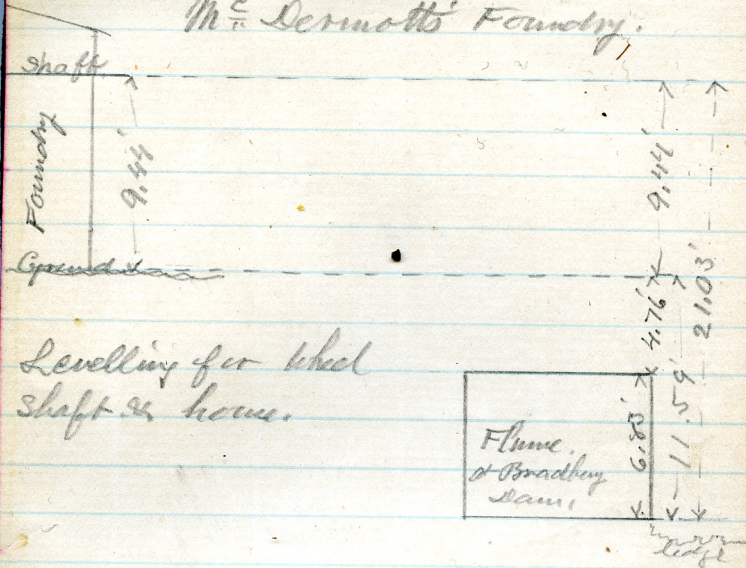
Chords on spur 55.10—
offset from Centre $3' 7"$

Drill Hole in curb stone on other
St. near Lincoln = 62.38' from
S.W. corner of und. bridge of Stone
#90 on North side Elm St. and
106.03 from N.W. cor. of brick office of
Hardy Machine Co. & $7' 9"$ from line
of Elm St. (This last stone has been
moved 17" towards Lincoln St.
in order to set telegraph pole.)

Sept. 16 89

59.

M^c Dermott's Foundry.



Levelling for wheel
shaft & house.

L. W. Stone

3" line used by Stone

Brick line of building
 Str. line

1" = .083'

S. W. P. Co.

33.32
 33.32
 1.40
 34.72

face of wall
 63.305'

0.180'

Brick line of building
 Str. line

63.560

30'

Heard

Brick line
 Str. line

2 1/2" Foundation wall on line

9/16"

Main St. Bridge

Excess 63.83
 63.500
 2.33

Heard's building (main) 30.00'
 Space to Street 33.32
 63.32

Heard over 2 1/2"
 " = 63.32
 63.583

Sold Heard 30.00'
 Left = 33.32

Survey from Union Falls Bridge to Salmon
Falls Dam - Nov. 8 '99. = W.S. Bennett, R.W. Libby 62
A. Gains - W.F. Cole

B.S.	I	F.S.	Angle	Dist.	Remarks
Bridge N. side	0		95° 7' R	138.5'	25' to H.W. (Sketch over)
	0		95° 7' R	188'	To Edge of water. 25' R, 25' L.
	0	1	90° 10' R	499.1'	on Dam - 4.2 S. of Crest. 8' S. Bay
0	1		75° 53' R	51'	To Angle in crest of Dam
0	1		51° 15' R	189'	" end of wooden dam
0	1		40° 3' R	312'	" N. cor. Gate Ho.
0	1		44° 30' R		" W. " "
0	1		138° 11' L	413'	" Beech tree. named in den
0	1	2	157° 48' R	235.5'	at 15' line on H.W., mark
1	2		28° 9' L	51.5'	to Bolt in stump. at pond
1	2	3	155° 57' L	492.5'	Sta. 2 + 250' to N.W. at Sta. 3
2	3	4	159° 5' L	431.5'	at Sta. 4 - 15' to R, to H.W.
3	4	5	156° 37' L	432.5'	74' I, to H.W.
					4 + 382' = 84' I, to H.W.
					Sta 4 + 158' = 58' I, to H.W.
					5 + 130' = 70' I, to H.W.
4	5	6	179° 31' R	241.5'	In Old Road - 64' I, to H.W.
5	6	7	180°	179'	46' I, to H.W. - Sta. 7 in Road
6	7	8	166° 37' L	278.7'	55' I, to H.W. = 7 + 250 = 65' I, H.W.
7	8	9	170° 48' L	190.2'	60' I, to H.W.
8	9	10	165° 47' R	255.3'	30' I, to H.W.
9	10	11	152° 40' L	260.2'	70' I, H.W.
					11 + 165' = 40' I, H.W.
10	11	12	155° 57' R	213.1'	30' I, to H.W.
11	12	13	178° 31' L	240'	N 48° E,
12	13	14	149° 58' R	62'	Sta. 14 on the shore
					20' I, to H.W.

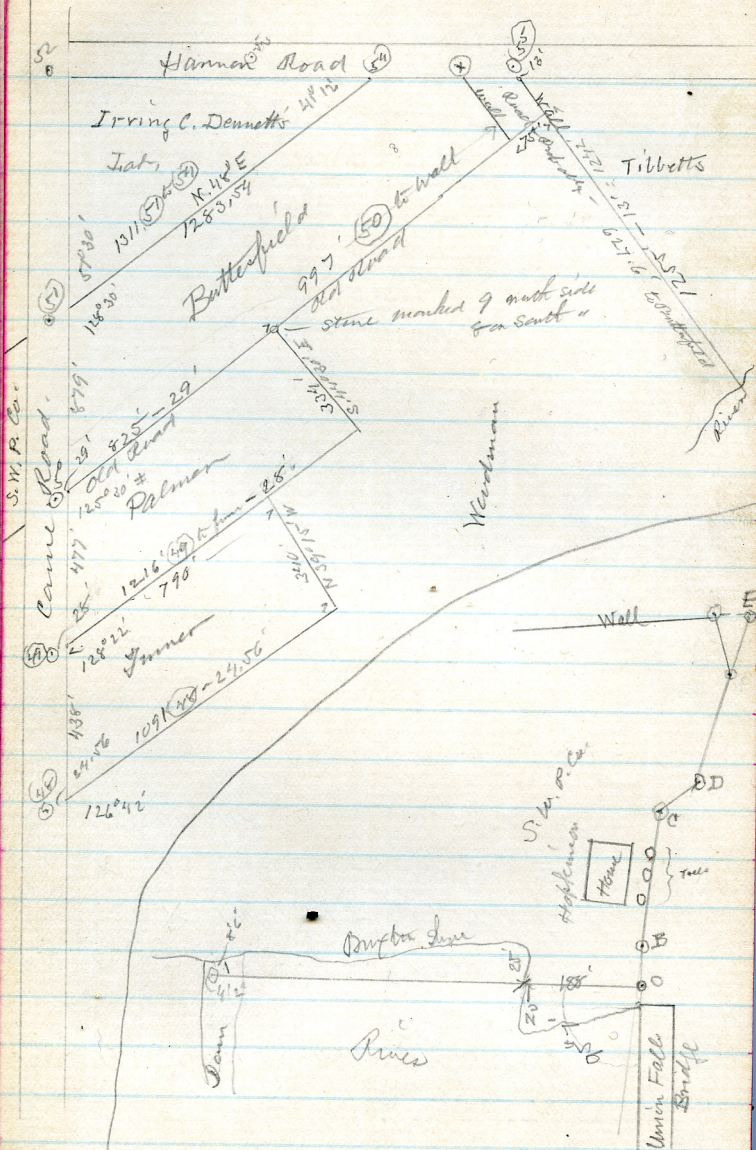
					S 42° 45' E.	Line
					Sta. 13 + 20° on Woodman	
13	14		126° 15' R	275'	H. W. West side River	
13	14		140° 52' I	424'	H. W. E. Side	"
13	14		176° 10' I	470'	H. W. W. Side	"
13	14		150° 35' I	787'	" " E. "	"
13	14	15	165° 5' I	1010'	" "	Island
14	15		161° 22' R	152'	" " E. side off End 98.	
14	15		125° 20' R	128'	" " S End Island	
14	15		143° 50' R	466'	" " E. Side at Pelly Brook	
14	15		130° 7' R	325'	" " W. Side Island	
14	15		129° 35' R	400'	" " " " " " " "	
14	15		126° 25' R	860'	E. Side River off End 98.	
14	15		122° 15' R	610'	W. Side 98. V. Hart's Ecology	
14	15	16	116° 45' R	972'	at H. W.	
15	16	17	139° 41' R	495'	17 + 100 = 40' I. at H. W. 17 + 200 = 50' I. at H. W. 17 + 300 = 50' I. at H. W.	
16	17	18	109° 9' I	577'	(Sta 174-18 on Pleasant Point. 20' I. to H. W. Sta 18 = 18 + 111' N. 35° 30' E. - Sta. 19 at H. W.	
17	18	19	154° 29' I	185.5'		
18	19	20	180°	151'	at H. W.	
19	20		158° 45' I	250'	Sta. 20 on the Point at foot of Hill To Point H. W. E. Side S. 8° 10' E.	
18	19	21	116° 48' I	260.96'	19 + 140' to foot of Hill -	
19	21	22	157° 50' R	261'	N 76° 45' E.	
21	22	23	166° I	409.4'	N 89° 15' W.	
22	23	24	105° 56' R	430.5'	In edge of Field N. 75° W.	
23	24	25	170° 41' R	98.5'	In Cor. of Field	
24	25		173° 30' R	180'	N. 70° 15' E.	
24	25		173° 30' R	180'	to H. W.	
24	25	26	119° 55' I	403.2'	N 67° 30' E.	

36	37	38	90° 25' I	486.5'	along W edge travelled road
36	37		83° 17' I	53'	N cor, Foss Cellar
36	37		116° 18' I	38.5'	E Cor. " "
36	37		180°	75'	To Cor. Fence & Brick wall. "A"
					36' R. + 36' I. to line
37	38	39	150° 6' R	428'	on line of Clark Fence
38	39	40	178° R	276.5'	3' R. to fence
					30' R. + 27.5' fence - road
39	40		173° 24' R	261.2'	To S. line Grant Lot. (Club)
					25' R. to line fence
39	40	41	173° 24' R	737.5'	to Opp. Carre Road
					28' I. to fence by Road
					Angle in Road 40 + 200'
					41' + 140' to E. side Sch. No. 35' R.
40	41	42	79° 40' I	875.9'	Fence 20' R. & 20' I.
					4' R. to road fence
41	42	43	174° 45' I	247.5'	at End div. from Clark & ^{brockburn}
42	43		56° 45' I		N. 33° W. sin. fence - at pasture
42	43	44	173° 34' R	167.5'	8' R. - 41.5 I. fence
43	44	45	180°	425'	13.5 R to fence.
	44				23' R. to line lot, Post & field.
					44 + 314' angle in Road
	45		164° 3' I		To Sta (22) edge of field
	45		167° 56' R		42' post in fence R.
	45		145° 02' R		102 " " " R.
	45		138° 30' R		150 " " " R.
44	45	46	112° 6' R	333.5'	9' R. to fence
45	46	47	166° 09' R	243'	24.5 R. " " 18.5 I. do
46	47	48	148° 19' I	459'	at Turner lot
47	48		126° 42' I		Turner Co. line
47	48	49	180°	438'	To Palmer's lot. - 215 R. fence
48	49		128° 32' I		" Fence

BS.	I.	F.S.	Angle	Dist.	Remarks
48	49	50	180°	477	See sketch over to Butterfield lot - S 33° 30' W
49	50		128° 30' L		Butterfield - Came line Came line on left.
49	50	51	179° 12' I	879'	Butterfield - L. Bennett, line
50	51		51° 40' I		Came lot fence
50	51	52	180°	842.5	Hannon Road - 13' R. Cor. Bennett & to N. side of
51	52	53	90° 42' I	295.5	21' I. to fence
52	53	54	178° 38' I	728'	road Butterfield & Bennett to point on wall N. side
53	54	X	169° 8' R	78.5	apparently old road - to Butterfield wall. 13.5' to wall
54	X		117° 39' I		There is 2 walls near together " " " - other side -
54	X	55	169° 42' R	129.5	S. 67° W. at Tibbitts line 16.5' to wall
X	55		107° 20' L		Tibbitts line
X	55	56	159° 05' R	847'	8.2' from cor. - 42' R. to wall to line & Encl Hannon Road
X	54		149° 40' R		Butterfield & Bennett line
52	54	X	169° 23'		S. 77 1/2° W (52 to 54 N 88 E) S 150° 16' W
55	56	57	176° 10' L	378.00	22' R. fence front grass yard
56	57	58	178° 54' R	299.3	
57	58	59	177° 9' R	327'	Tibbitts line & fence line
58	59	60	175° 12' I	293'	S. 50° 45' W. - offset 6.5' R. from (59) to (60)
59	60	61	180°	164'	
60	61	62	180°	172'	
61	62	63	180°	80'	and Hannon line - 709 total to line wall S.W. & Co
62	63		114° 77' R	17'	S.W. & Co. corner to wall at Oak tree
62	63	64	114° 17' R	780.8	578' to old Road S. side line 241.3 to Sta. E - 539.5'
					780' E to road to Silver S. 15° 30' E.

Sketch for Survey - Union Falls to S. Falls

68.

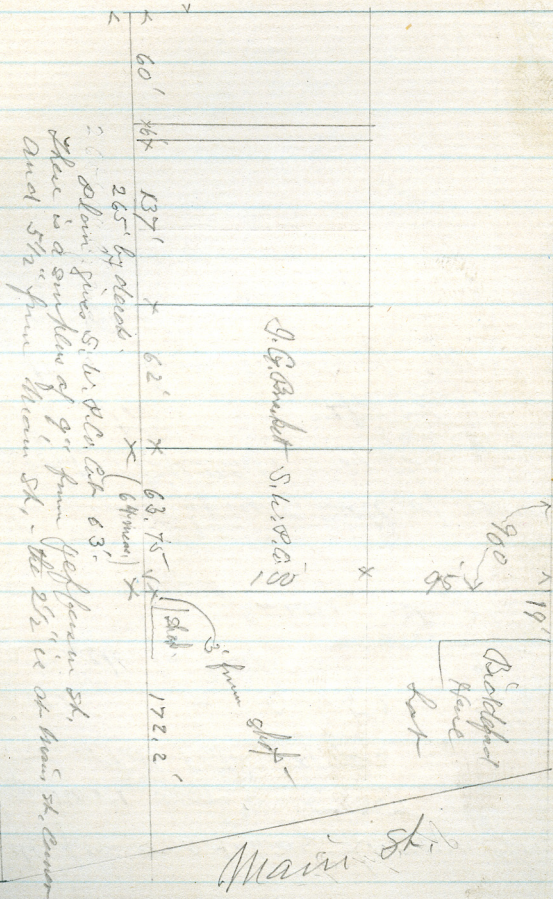


Sanney for lot on West side of Washington St.
 Aug. 14, 1902

Sold to F. X. Cote.

Jefferson St.

40'



Sept. 23, 1904

70.

Grade for road-way - Lauma yard
R.D. by No. 4 bar - 5.135
Door stool - Cloth Wall 4.683

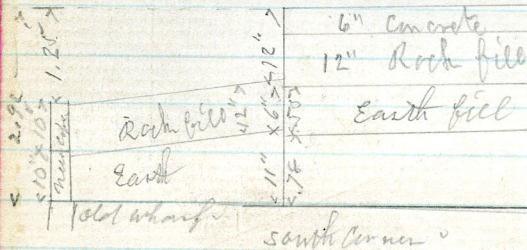
Grade = $0.452 = 5\frac{7}{16}"$
Drop 2" below for track 2
Grade = $3\frac{7}{16}"$

Hub for opposite side of road
Door stool Cloth Wall = 4.683
Hub by stave $303 = 4"$
 21.356
Run to curb on N. side of yard in
front of Pickens.

Poffenell Ave 17.8' + wharf PL

Barren 4' 9" back to back
Dune 7'

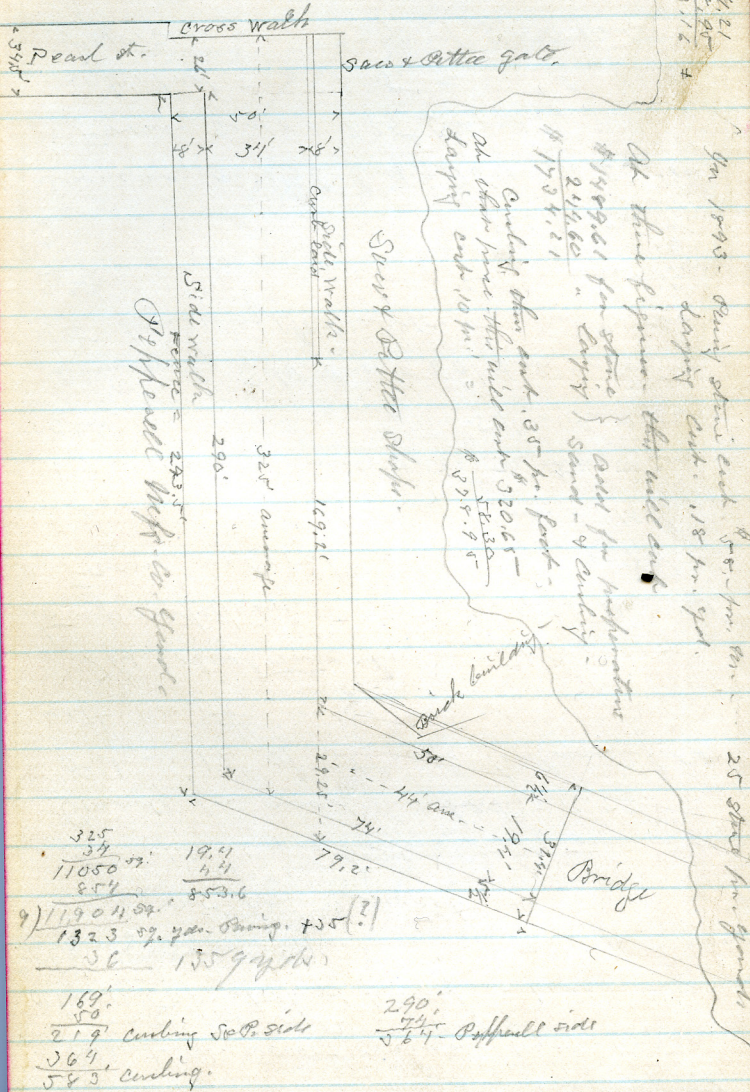
Coal pile - 15' base = $1\frac{1}{3}$ to 1
12' high



Survey for Paving Laceria St. - Sept. 7 '06
 From bridge to Pearl St. -

74.

1734.21
 578.95
 2110.16



Jan 1893 - Survey street cost 500.00 per m.
 Laying out .18 per yd.

At these figures - this will cost

\$1499.61 for stone
 244.60 " Laying
 1734.21
 Cost for preparation
 Sand - 4 curbing

Curbing 10 m. cost .35 per foot
 At other prices this will cost 320.65 -
 Laying out 10 m. cost 295.95

Saco & Pettie street

Side walk

325
 34
 11050 sq. ft. 19.4
 854 44
 853.6
 9) 11904 sq. ft. 132.3 sq. yds. Paving 1359 yds.
 36
 169.2
 50
 219 curbing S & P side
 364
 583 curbing

290
 74
 364 Puffball side

Completed Nov. 1907

York Dam Measurements

- Aug. 8, 1908. -

Beginning at East or York end.
Wooden dam = 145 ft.

Stone dam with wooden Cap = 94',
making 139' of wooden Cap dam.
110' 9" to fish-way -
142' 9" to Angle.

From Angle to West End of
dam = 191' 4"

$142' 9" - 139' = 3' 9"$ of stone dam
East of Angle.

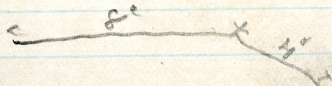
$191' 4" + 3' 9" = 195' 1"$ of all stone
dam.

Total length of dam $195' 1" + 139' = 334' 1"$

Slope = $8\frac{3}{4}"$ in 2' - but varies -
Grub stroke 7" wide.

- See over -

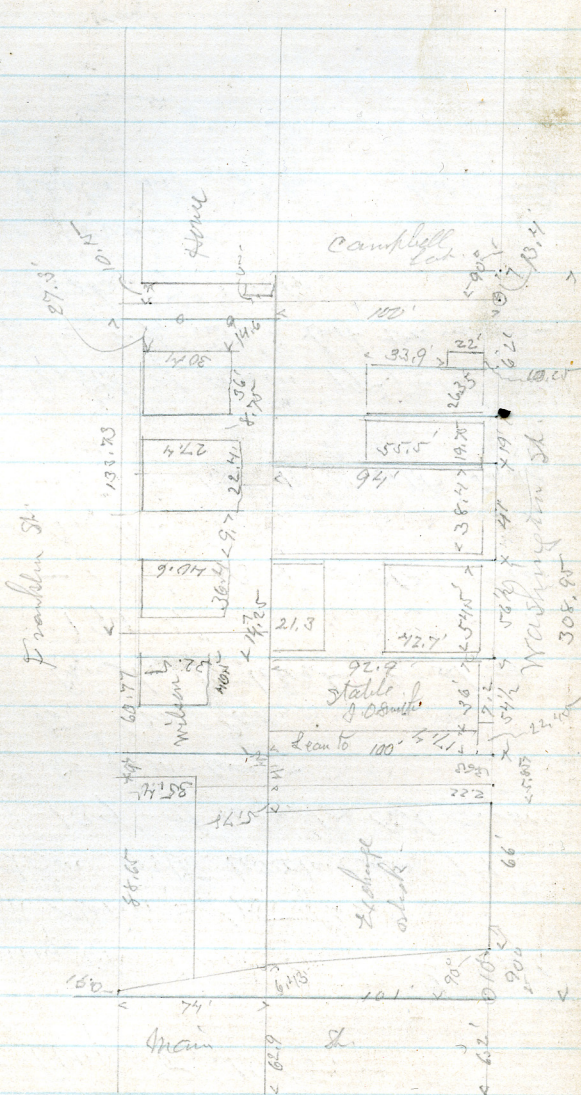
Grub plates all 7" wide. will take
12" iron



Survey on Washington & Franklin Streets
Oct. 14, 1905

76.

For Post Office Bldg.



Measurements for location of scars
in Stone of York Dam.

Begin at W. End.

2.40	101.65
5.06	104.10
6.70	106.50
9.40	108.30
11.75	110.40
13.90	113.10
16.30	115.60
18.30	117.90
21.50	119.80
24.00	123.00
26.55	125.25
29.45	127.35
31.30	130.40
34.30	133.50
37.40	136.90
39.90	137.30
42.25	140.50
45.15	142.70
46.90	145.15
49.60	147.40
53.00	149.80
54.90	151.70
56.90	153.90
58.50	156.00
60.35	158.35
62.10	160.40
64.10	162.40
65.90	164.50
67.70	166.60
71.00	168.60
73.15	171.80
74.90	174.30
76.10	176.40
80.00	178.50
81.90	181.20
84.60	183.60
86.90	185.60
88.60	188.60
91.60	190.20
94.50	191.60
97.20	1.60
99.80	2.90

Slope of Dam -
at W. End =

$8\frac{3}{4}$ " in 2'

At Angle

$3\frac{1}{2}$ " in one foot

$9\frac{5}{8}$ " " 2 "

At 2' back.

5" in 1 ft.

$9\frac{5}{8}$ " in 2 ft.

At 40' West.

$3\frac{3}{4}$ " in 1'

$8\frac{5}{8}$ " " 2'

At about midway -

$4\frac{1}{2}$ " in 1'

9" " 2'

- Over -

to Angle Stone

up to wooden dam.

York Town - Measurements for 78.
 Old holes drilled in stone.
 "S" = small hole for fresh plate.
 "B" = Big " " Flash board pin.

Begin at West End.

on stone, from center

0.83 = 2" S	38.80 = 6 3/4" B	90.10 = 6 1/2" B
1.05 = 6 1/4" B	39.45 = 3 1/4" S	90.55 = 2" S
1.33 = 7 3/4" B	40.67 = 6 3/4" B	91.40 = 7 1/4" S
2.10 = 6 1/2" S	41.10 = 6 1/4" B	90.65 = 3" S
2.20 = 8" B	41.50 = 2 1/2" S	92.50 = 6" B
3.50 = 3" S	41.70 = 6 3/4" B	94.50 = 2" S
3.60 = 8 3/4" B	43.10 = 9" S	97.40 = 8 1/4" S
4.70 = 6" S	44.50 = 2 1/4" S	97.80 = 2 1/4" S
6.10 = 2 1/2" S	45.08 = 6 1/4" B	97.95 = 5 1/2" S
6.30 = 9" B	47.70 = 4" S	100.75 = 6" B
7.15 = 6" S	47.90 = 7 1/2" B	101.35 = 2 1/4" S
7.75 = 6" B	49.00 = 7 1/2" B	102.50 = 6 3/4" B
8.65 = 3" S	48.50 = 5 1/4" S	104.40 = 2" S
8.65 = 8" B	50.20 = 3" S	107.00 = 1 1/2" S
9.00 = 10" B	51.10 = 1 1/2" B	107.40 = 6 1/2" B
9.75 = 3 1/2" S	52.50 = 1 1/4" S	107.70 = 6 1/2" B
11.20 = 3 1/2" S	54.30 = 7" B	109.05 = 7" B
12.65 = 6 3/4" B	56.05 = 2 1/2" S	110.25 = 2" S
14.40 = 3" S	59.20 = 7" B	112.00 = 14 1/2" B
15.00 = 7" B	59.25 = 3" S	112.25 = 2" S
16.00 = 3 1/2" S	60.90 = 5 1/2" S	112.80 = 3 1/2" S
16.90 = 8" B	61.50 = 7" B	114.50 = 2 1/4" S
17.65 = 4" S	62.75 = 7" B	114.80 = 7 1/2" B
19.10 = 8" S	62.87 = 2" S	116.20 = 6 3/4" B
19.65 = 3 1/4" S	65.00 = 2 1/2" S	117.35 = 2" S
20.40 = 7" B	65.40 = 6 3/4" B	120.42 = 2" S
21.20 = 4" S	66.40 = 2 1/2" S	121.50 = 7 1/2" B
22.20 = 4" S	68.67 = 3" S	122.20 = 4" S
23.30 = 7" B	69.55 = 6 1/2" B	122.35 = 9 1/4" B
24.80 = 7" B	71.85 = 2 1/4" S	123.50 = 7" B
25.37 = 3" S	72.20 = 6 1/2" B	124.00 = 2 1/2" S
27.27 = 3" S	72.75 = 6" B	124.55 = 7" B
30.20 = 2 1/2" S	73.35 = 6" B	126.95 = 1 1/2" S
30.50 = 7" B	74.20 = 6 1/4" B	127.75 = 7" B
32.05 = 4" S	75.40 = 1 1/2" S	128.67 = 4 1/2" S
32.67 = 3 1/2" S	77.00 = 6 1/2" B	129.70 = 7" B
33.47 = 3" S	77.17 = 1 3/4" S	131.10 = 3 1/2" S
33.00 = 7 1/2" B	78.00 = 6 1/2" B	131.75 = 6 3/4" B
36.50 = 2 1/4" S	79.40 = 2 1/4" S	132.70 = 2 1/2" S
	80.90 = 3" S	134.10 = 3" S
	81.23 = 6 1/2" B	134.70 = 6" B
	83.35 = 4" S	136.37 = 2" S
	85.15 = 2" S	139.10 = 7" B
	85.25 = 6 1/2" B	139.45 = 1" S
	87.95 = 2" S	139.60 = 7" B
		140.05 = 6 3/4" B

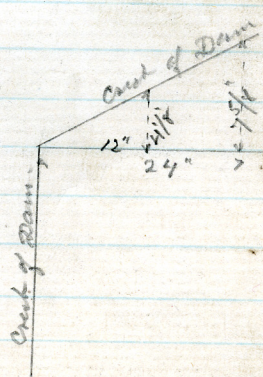
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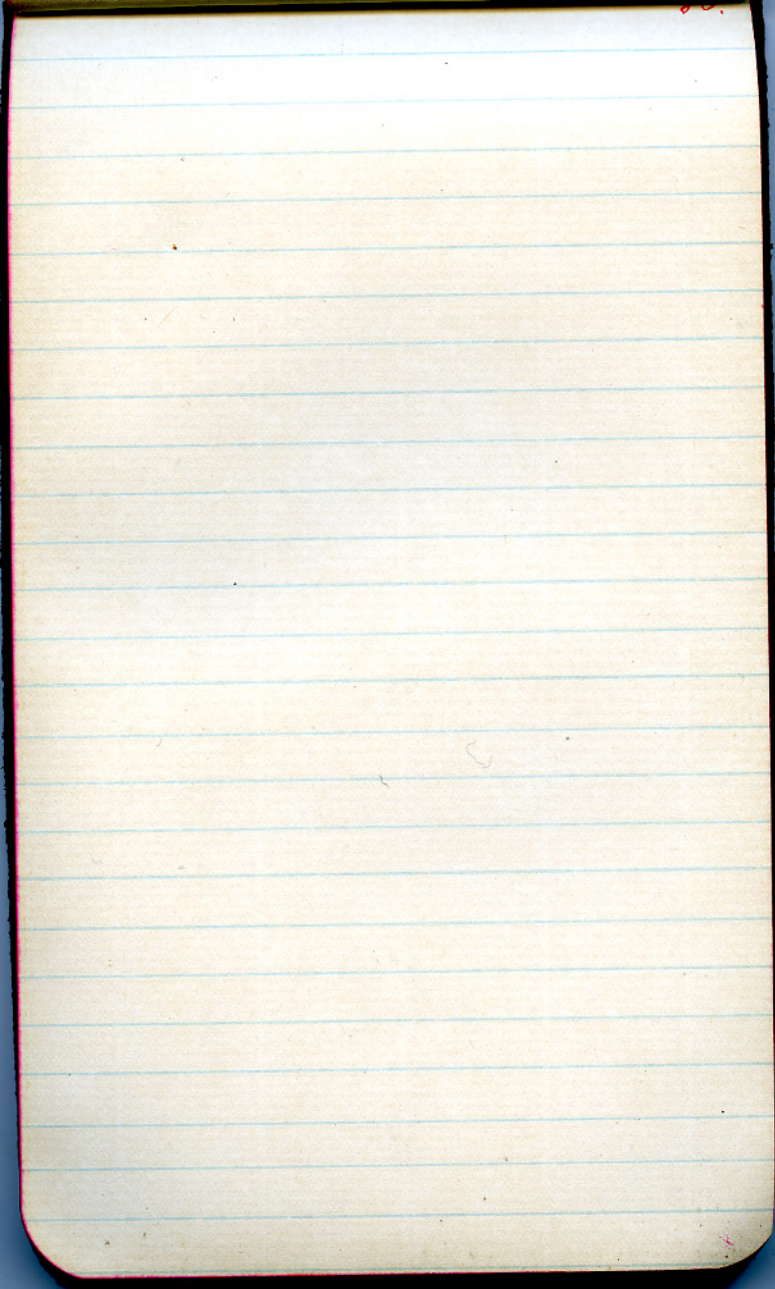
- 141.60 = $3\frac{3}{4}$ " S
- 144.725 = 2" S
- 145.62 = $6\frac{1}{2}$ " B
- 146.30 = 7" B
- 146.85 = $3\frac{1}{2}$ " S
- 147.00 = $6\frac{3}{4}$ " B
- 148.60 = 3" S
- 149.25 = $3\frac{3}{4}$ " S
- 150.92 = $2\frac{3}{4}$ " S
- 152.40 = 4" S
- 154.50 = 6" B
- 155.50 = 6" B
- 156.40 = $1\frac{3}{4}$ " S
- 157.93 = $2\frac{1}{4}$ " S
- 159.42 = 1" S
- 161.20 = $1\frac{1}{4}$ " S
- 161.55 = 6" B
- 162.00 = $1\frac{3}{4}$ " S
- 162.50 = $5\frac{1}{2}$ " B
- 163.95 = 4" S
- 165.90 = $1\frac{1}{4}$ " S
- 169.10 = $1\frac{3}{4}$ " S
- 171.00 = 6" B
- 171.25 = 1" S
- 173.45 = 2" S
- 174.85 = 4" S
- 175.85 = 6" S
- 177.82 = 6" B
- 178.00 = $1\frac{1}{4}$ " S
- 181.62 = 2" S
- 182.75 = $6\frac{1}{2}$ " B
- 184.70 = 6" B
- 185.05 = $1\frac{1}{4}$ " S
- 185.25 = 6" B
- 186.25 = 6" B
- 188.10 = $1\frac{1}{4}$ " S
- 190.75 = 2" S
- 191.05 = 6" B
- 191.95 =

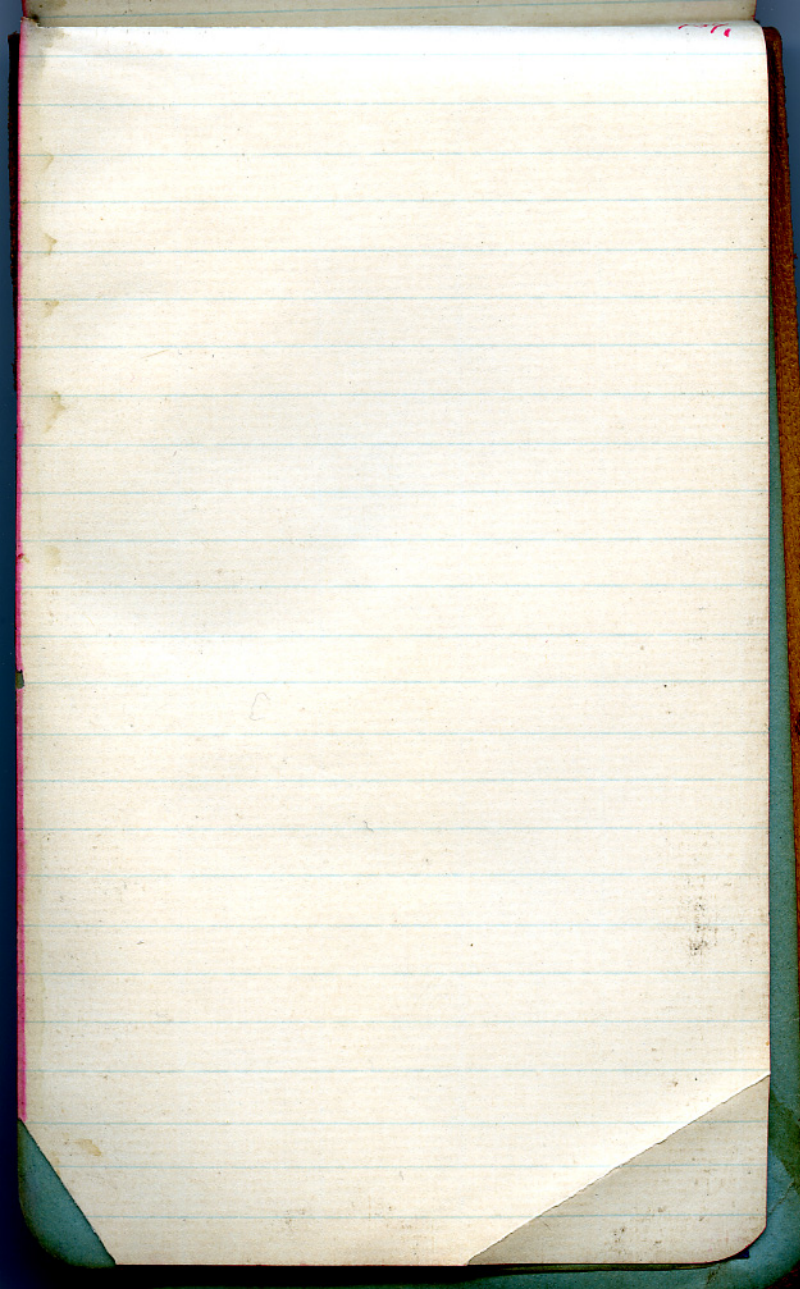
0.54 beyond 3" B to Angle
 3.10 to edge of stone.

- Note: -

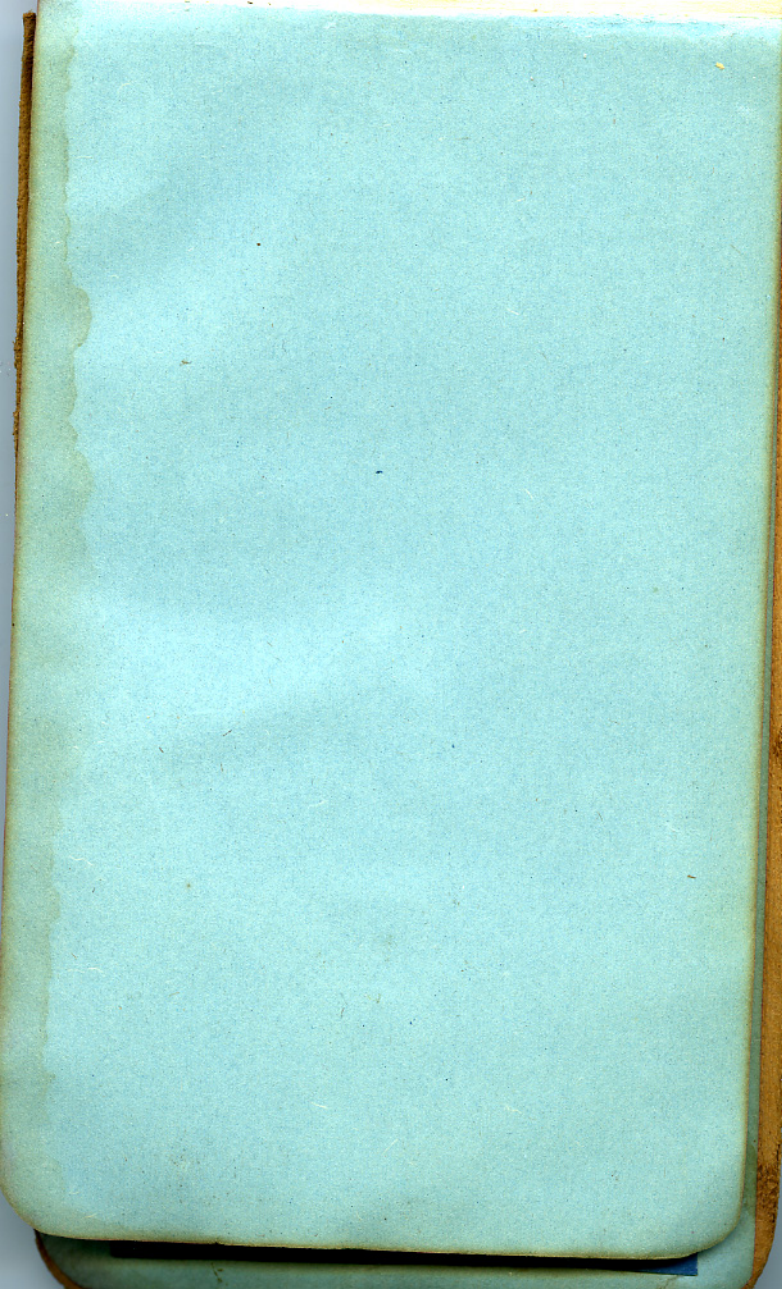
Next to last stone
 before the angle, square.
 then $25\frac{1}{2}$ " to W. edge of
 last stone, measured 12"
 up stream from flash band
 The Angle Stone = $26\frac{3}{4}$ "
 wide on the 12" line
 Next stone beyond angle
 20" to 2nd stone beyond
 22" to edge of last stone.







1887



150
 77 27
 62 33

140
 28 24
 141 23

7.200
 0.940
 6.290

180
 111 29
 65 51

1412 Rod

446 46 27
 4902
 9529

1.860
 4.902
 6.762

550 55
 45 20
 60 85

Fourths 6' Mean

8 1/2 HP #

14' 0" w

14' 3" Next 1st. Minimum

16' 0" w

15' 4" Next to bottom of hole

THE MAGNETIC VARIATION, PORTLAND, ME.

	1760	'70	'80	'90	1800	'10	'20	'30	'40	'50	'60	'70	'80	'90	1900
0	8°06'	8°06'	8°12"	8°30'	8°54'	9°24'	10°00'	10°36'	11°	11°	12°21'	12°48'	13°	13°18'	14.17
1	"	8°06'36"	8°13'48"	8°32'24"	8°57'	9°27'36"	10°	10°	11°	11°	12°	12°	13°	13°	
2	"	8°07'12"	8°15'36"	8°34'48"	9°00'	9°31'12"	10°	10°	11°	11°	12°	12°	13°	13°	
3	"	8°07'48"	8°17'24"	8°37'12"	9°03'	9°34'48"	10°	10°	11°	11°	12°	12°	13°	13°	
4	"	8°08'24"	8°19'12"	8°39'36"	9°06'	9°38'24"	10°	10°	11°	12°	12°	12°	13°	13°	
5	"	8°09'	8°21'	8°42'	9°09'	9°42'	10°18'	10°	11°	12°	12°	12°	13°	13°	
6	"	8°09'36"	8°22'48"	8°44'24"	9°12'	9°45'36"	10°	10°	11°	12°	12°	12°	13°15'	13°	
7	"	8°10'12"	8°24'36"	8°46'48"	9°15'	9°49'12"	10°	11°	11°	12°	12°	13°	13°	13°	
8	"	8°10'48"	8°26'24"	8°49'12"	9°18'	9°52'48"	10°	11°	11°	12°	12°	13°	13°	13°	
9	"	8°11'24"	8°28'12"	8°51'36"	9°21'	9°56'24"	10°	11°	11°	12°	12°	13°	13°	13°	

